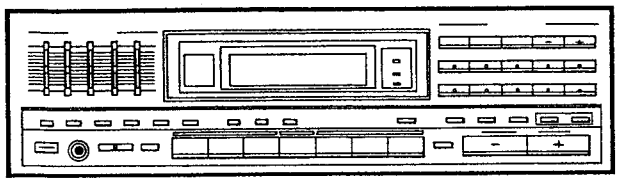
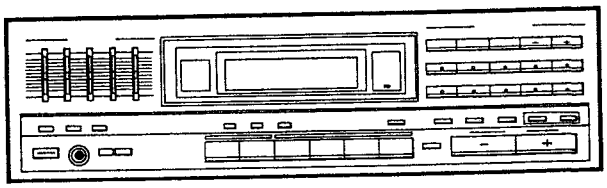
Operating Instructions

AUDIO/VIDEO STEREO RECEIVER

VSX-3000
VSX-2000



VSX-3000



VSX-2000

Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT NOTICE
[For U.S. and Canadian models]

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

[For Canadian model]

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION: POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

CONTENTS

Before operating, adjust the position of these switches 3
Features 3
Checking accessory items 3
Surround system (VSX-3000 only) 4
Inserting the batteries into the remote control unit 4
Rear panel facilities 5
Audio system connections 8
Video system connections 9
Front panel facilities 10
Remote control unit operation 14
Setting the clock time 17
Graphic equalizer controls 17
Listening to the broadcast 18
Presetting stations 19
To perform recording with a tape deck 20
Using the built-in timer 20
Playing other music sources 21
Using a TV set to watch programs from connected video components 22
Hi-Fi video recording 22
Video tape copying 23
How to use the video signal selector 24
Hints for better reception 25
Troubleshooting 26
Specifications 27

PIONEER®
The future of sound and vision.

SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the appliance is operated.

RETAIN INSTRUCTIONS — The operating instructions should be retained for future reference.

HEED WARNING — All warnings on the appliance and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.

WATER AND MOISTURE — The appliance should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

LOCATION — The appliance should be installed in a stable location.

WALL OR CEILING MOUNTING — The appliance should not be mounted to a wall or ceiling.

VENTILATION — The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

HEAT — The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

POWER SOURCES — The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

POWER-CORD PROTECTION — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

POLARIZATION — If your purchased product is provided with a polarized power plug, please read the following instructions. This product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

CLEANING — The appliance should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.

POWER LINES — An outdoor antenna should be located away from power lines.

NONUSE PERIODS — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

OBJECT AND LIQUID ENTRY — Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

DAMAGE REQUIRING SERVICE — The appliance should be serviced by Pioneer authorized service center or qualified service personnel when:

- The power-supply cord or the plug has been damaged; or
- Objects have fallen, or liquid has been spilled into the appliance; or
- The appliance has been exposed to rain; or
- The appliance does not appear to operate normally or exhibits a marked change in performance; or
- The appliance has been dropped; or the enclosure damaged.

SERVICING — The user should not attempt to service the appliance beyond that described in the operating instructions. For all other servicing, contact the nearest Pioneer authorized service center.

OUTDOOR ANTENNA GROUNDING — If an outside antenna is connected to the antenna terminal, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.
In the U.S.A. section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Fig. A.

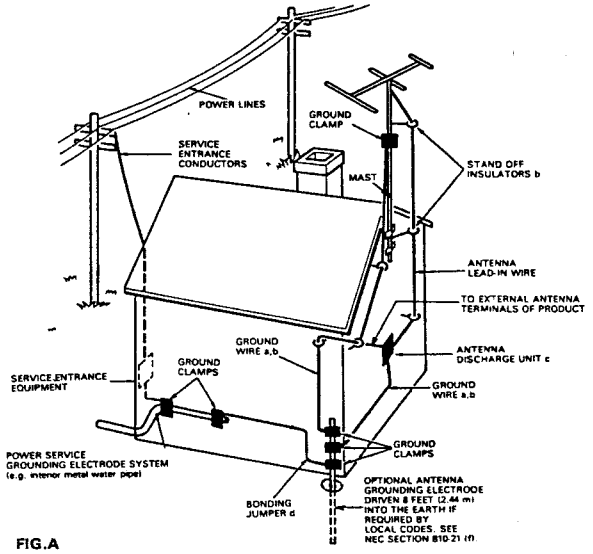

POWER LINES
GROUND CLAMP
SERVICE ENTRANCE CONDUCTORS
MAST
STAND OFF INSULATORS b
ANTENNA LEAD-IN WIRE
TO EXTERNAL ANTENNA TERMINALS OF PRODUCT
GROUND WIRE a,b
ANTENNA DISCHARGE UNIT c
GROUND CLAMPS
SERVICE ENTRANCE EQUIPMENT
GROUND WIRE a,b
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (e.g. interior metal water pipe)
BONDING JUMPER d
OPTIONAL ANTENNA GROUNDING ELECTRODE DRIVEN 8 FEET (2.44 m) INTO THE EARTH IF REQUIRED BY LOCAL CODES. SEE NEC SECTION 810-21 (f)

FIG.A

a) Use No. 10 AWG (5.3 mm²) copper, No. 8 AWG (8.4 mm²) aluminum, No. 17 AWG (1.0 mm²) copper-clad steel, bronze wire, or larger as ground wire.
b) Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4 feet (1.22 meters) to 6 feet (1.83 meters) apart.
c) Mount antenna discharge unit as closely as possible to where lead-in enters house.
d) Use jumper wire not smaller than No.6 AWG (13.3 mm²) copper or equivalent when separate antenna-grounding electrode is used.

IMPORTANT 1

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Note to CATV system installer

This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

BEFORE OPERATING, ADJUST THE POSITION OF THESE SWITCHES

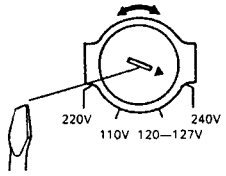
LINE VOLTAGE SELECTOR SWITCH

Only multi-voltage models are provided with this switch. U.S., Canadian, European, U.K., and Australian models are not provided with this switch.
Mains voltages in Saudi Arabia are 127V and 220V only. Never use this model with 110V setting in Saudi Arabia.

The line voltage selector switch is on the rear panel. Before your model is shipped from the factory, this switch is set to the power requirements of the destination. Check that it is set properly before plugging the power cord into the AC outlet. If the voltage is not properly set or if you move to an area where the voltage requirements differ, adjust the selector switch as follows.

1. Use a medium-size screwdriver.
2. Insert the screwdriver into the groove on the voltage selector, and adjust so that the tip of the groove points to the voltage value of your area.

Medium-size screwdriver



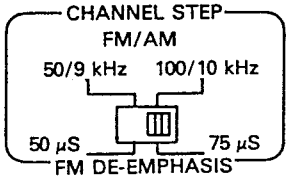
CHANNEL STEP/FM DE-EMPHASIS SWITCH (Not available on U.S. and Canadian models)

The unit has been factory preset to the channel allocation and de-emphasis value for the area in which it is to be sold. If these values are set incorrectly, the frequency display may stop at the wrong frequency, or sound may be distorted, resulting in an inability to reproduce reception signals at their proper sound quality. For this reason, be sure to confirm that the values are set correctly before first using the unit.

[100 kHz/10 kHz/75 μs] position:
Set to this position for areas with FM reception step of 100 kHz, AM 10 kHz, and de-emphasis of 75 μs.

[50 kHz/9 kHz/50 μs] position:
Set to this position for areas with FM reception step of 50 kHz, AM 9 kHz, and de-emphasis of 50 μs.

NOTE:
When unsure about the channel allocation and de-emphasis values for your area, consult your dealer for correct information.



FEATURES

The VSX-3000/2000 is an audio-visual component combining the functions of receiver, wireless remote control and audio-video selector. It will play a central role in your enjoyment of audio-visual media.

- **SURROUND FUNCTION (VSX-3000 only)**

Provided with a surround function utilizing a speaker matrix.

- **5-ELEMENT GRAPHIC EQUALIZER**

The receiver is provided with a graphic equalizer which enables you to change the sound quality as desired when playing a program source.

- **VCR COPYING AND MONITORING**

VSX-3000:
VCR 1—VCR 2: Copying of video cassette tapes can be performed in either direction.
VDP/VIDEO—VCR 1, VCR 2: Allows simultaneous production of two copies from a single video cassette tape or video disc.

VSX-2000:
VDP/VIDEO—VCR: Copying of video cassette tapes (or video disc) can be performed from VDP/VIDEO to VCR.

- **VIDEO SIGNAL SELECTOR (Simulcast function)**

Allows free combination of various audio and video sources during playback and over-dubbing, enabling you to produce your own original background videos.

- **BUILT-IN TIMER**

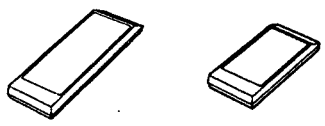
The receiver contains a timer which can be set to go ON and OFF once a day. You can use it to perform an air check or to wake you up to music. It also contains a sleep timer which turns off a radio broadcast after you have fallen asleep.

CHECKING ACCESSORY ITEMS

FM T-type Antenna
Model VSX-3000 Model VSX-2000

AM Loop Antenna

Remote control unit
Model VSX-3000 Model VSX-2000

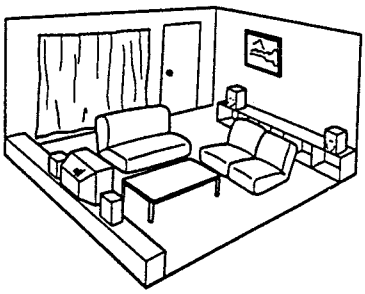


Dry cell battery × 2

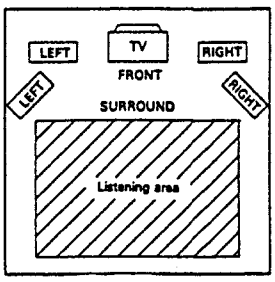
SURROUND SYSTEM (VSX-3000 Only)

What is surround sound?

With ordinary stereo, sound normally comes only from speakers in front of the listener. In a concert hall or theater though, sound reflected from the walls and ceiling reaches the listener from all directions. This is what accounts for the feeling of ambience or spaciousness of a live performance. Surround sound works to reproduce these effects to provide fuller, more "live" sound.



Example A:



Speaker System Placement Examples

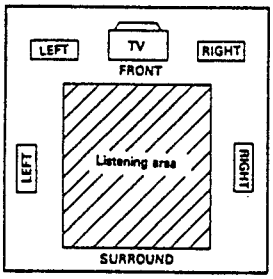
The sound effects obtained in a surround system depend on speaker placement. Experiment with various arrangements to find the one most suited to your tastes.
Placing the speakers so that they are slightly higher than ear level contributes to sound quality.

[Example A:]
Sound appears to come from directly in front of listener. Good for listening to music recordings.

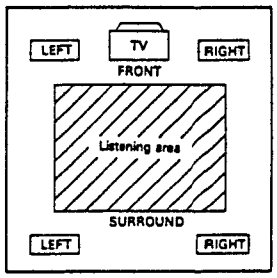
[Example B:]
Offers most varied effects; good for watching sports programs or listening to live recordings.

[Example C:]
Good sound dispersion; recommended for movies, etc.

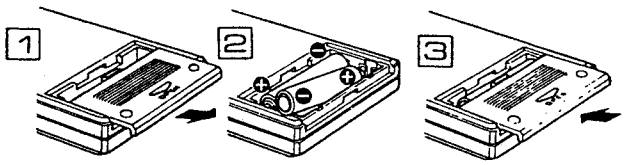
Example B:



Example C:



INSERTING THE BATTERIES INTO THE REMOTE CONTROL UNIT



[1] Remove the cover of the battery compartment on the reverse side of the remote control unit. This can easily be done by pressing down on the cover with your thumb and pulling it in the direction of the arrow.
[2] Take out the two size "AAA" [IEC R03 (UM-4)]dry cell batteries supplied and load them into the battery compartment, taking care to follow the markings on the compartment.
[3] Replace the cover of the battery compartment.

Cautions for handling dry cell batteries

Misusing dry cell batteries can result in electrolyte leakage or explosions. Bear in mind the following points for getting the most out of your batteries.

- When loading the batteries into the battery compartment, make sure the plus ⊕ and minus ⊖ polarities correspond to the markings on the compartment.
- Even though they may be the same shape, batteries come with different voltage ratings. Do not mix or use different types of batteries together. Use only the same kind of batteries.
- Do not mix up new batteries and used batteries but replace all the batteries at the same time.
- Do not heat up, disassemble or short circuit batteries or throw them into a fire.
- Some batteries are rechargeable while others are not. Observe the cautionary notes on the batteries and use them properly.

REAR PANEL FACILITIES

[VSX-3000]
• For details of the VSX-2000, refer to page 7.

INPUT jacks
PHONO ... Connect to the output cables from a turntable.
CD ... Connect to the output jacks of a compact disc player.

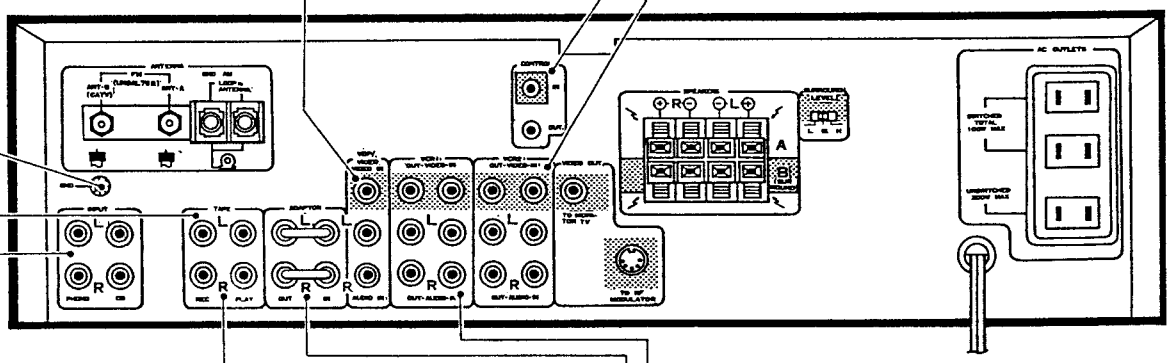
TAPE jacks
Connect these jacks to the tape deck.

GND terminal
Connect to the ground lead of a turntable.

VDP/VIDEO jacks
[VIDEO IN]
When watching the video image from a LaserVision player (VDP) or a VCR used for playback, connect its VIDEO OUTPUT jack here.
[AUDIO IN (L, R)]
When playing back the audio channel from a LaserVision player (VDP) or a VCR for playback, connect its AUDIO OUTPUT jacks here.

REMOTE CONTROL IN/OUT jacks
IN: Connect this terminal to other Pioneer components when using those components to control this unit.
OUT: Connect this terminal to other Pioneer components when using this unit's remote control to control the other components.

VCR 2 jacks (VSX-3000 only)
[VIDEO OUT]
When copying program materials from the video component connected to the VCR 1 or VDP/VIDEO jacks, connect to the VIDEO INPUT jack of the VCR used for recording.
[AUDIO OUT (L, R)]
When copying program materials from the video component connected to the VCR 1 or VDP/VIDEO jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.
[VIDEO IN]
When monitoring the video image from a VCR used for copying, connect its VIDEO OUTPUT jack here.
[AUDIO IN (L, R)]
When monitoring the audio channel from a VCR used for copying, connect its AUDIO OUTPUT jacks here.



Connecting for Recording
The tape recording jack (TAPE REC) on the tape deck should be connected to the REC/OUT side of the TAPE jack on the receiver with a pin plug connecting cord.

Connecting for Playback
Connect the TAPE PLAY jack on the tape deck and the PLAY/IN side of the TAPE jack on the receiver with a pin plug connecting cord.

ADAPTOR jacks
By using these jacks, you can connect the receiver to an audio adaptor unit such as a graphic equalizer or a surround processor.
Before making connection to these jacks, remove the connector bars.

Connecting for output
Connect the output jack (OUT) of the receiver to the input (IN) jack of the audio adaptor unit using a pin plug connecting cord.

Connecting for input
Connect the input jack (IN) of the receiver to the output (OUT) jack of the audio adaptor unit using a pin plug connecting cord.

Precaution
After the connector bars are removed and the audio adaptor connected, no sound will be emitted unless the adaptor is operated.

VCR 1 jacks (VSX-3000 only)
[VIDEO OUT]
When copying program materials from the video component connected to the VCR 2 or VDP/VIDEO jacks, connect to the VIDEO INPUT jack of the VCR used for recording.
[AUDIO OUT (L, R)]
When copying program materials from the video component connected to the VCR 2 or VDP/VIDEO jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.
[VIDEO IN]
When monitoring the video image from a VCR used for copying, connect its VIDEO OUTPUT jack here.
[AUDIO IN (L, R)]
When monitoring back the audio channel from a VCR used for copying, connect its AUDIO OUTPUT jacks here.

FM/AM ANTENNA terminals
Use these antenna terminals for reception of CATV FM, normal FM and AM broadcasts

[TO MONITOR TV jack]
Use to connect a TV set for watching program materials from the VCR or VDP connected to this unit.
Connect to a monitor TV or to a TV set with video input terminals.

[TO RF MODULATOR jack]
Use to connect a TV set for watching program materials from the VCR or VDP connected to this unit.
Use to connect a normal TV set. When performing connections, the RF MODULATOR JA-RF5 (sold separately) is required. By connecting an RF modulator, video signals can be converted to VHF signals (U.S. channel 3 or 4), thus allowing this unit to be used to view the selected source on a normal television set.

NOTE:
A "normal TV set" as noted above is one for which RF connections alone are possible.

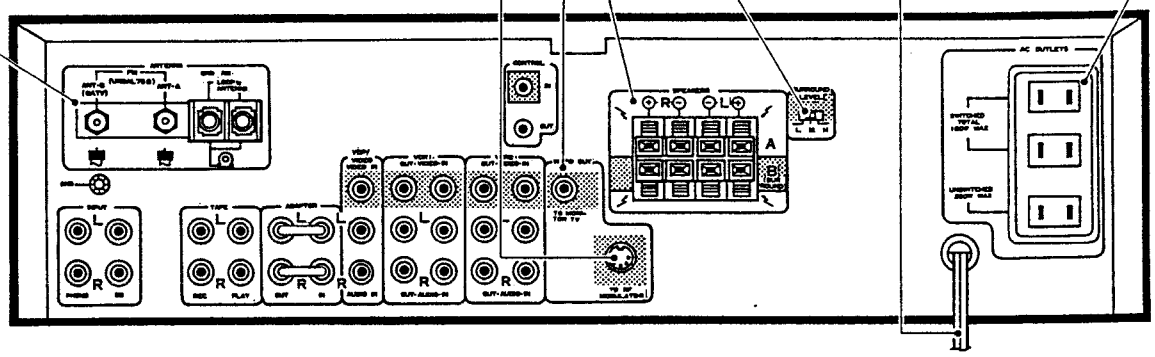
AC OUTLETS
[SWITCHED]
Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W.
[UNSWITCHED]
Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 200 W.
The equipment should be disconnected by removing the mains plug from the wall socket when not in regular use, e.g. when on vacation.

NOTE:
Do not connect appliances with high power consumption such as heaters, irons, or television sets to the AC OUTLETS in order to avoid overheating or fire risk.
This can cause the receiver to malfunction.

SPEAKERS terminals
A: Connect to a first set of speakers (or the front speakers in a surround system).
B: Connect to a second set of speakers (or the surround speakers in a surround system).

SURROUND LEVEL selector switch (VSX-3000 only)
By selecting one of the three positions (L: Low, M: Mid, H: High), the sound volume from the surround speakers can be changed.

Power cord



[VSX-2000]

- For details of the VSX-3000, refer to pages 5 and 6.
- A section which consists of only a title is common to that of the VSX-3000. Refer to the section of the same title in the description of the VSX-3000.

CATV CONTROL jack (VSX-2000 only)

You can connect this jack to the CATV ANTENNA CONTROL UNIT JA-AT5 (sold separately). By using the JA-AT5, you can select either an FM broadcast or a CATV FM program (FM simulcast TV program).

INPUT jacks

TAPE jacks

Connect these jacks to the tape deck.

NOTE:
You cannot connect these jacks to an audio adaptor.

GND terminal

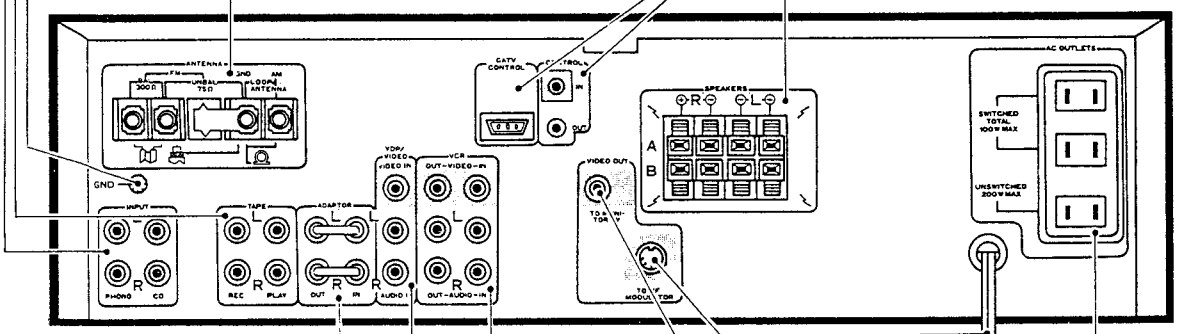
FM/AM ANTENNA terminals

Use these antenna terminals for receiving FM and AM broadcasts.

REMOTE CONTROL IN/OUT jacks

SPEAKERS terminals

A: Connect to a first set of speakers.
B: Connect to a second set of speakers.



ADAPTOR jacks

VDP/VIDEO jacks

POWER CORD

AC OUTLETS

TO RF MODULATOR jack

TO MONITOR TV jack

VCR jacks

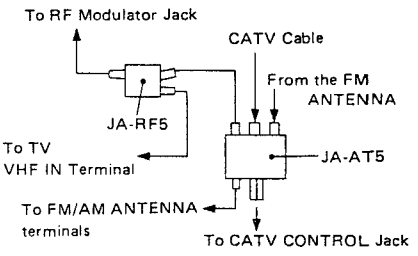
[VIDEO OUT]
When copying program materials from the video component connected to the VDP/VIDEO jacks, connect to the VIDEO INPUT jack of the VCR used for recording.

[AUDIO OUT (L,R)]
When copying program materials from the video component connected to the VDP/VIDEO jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

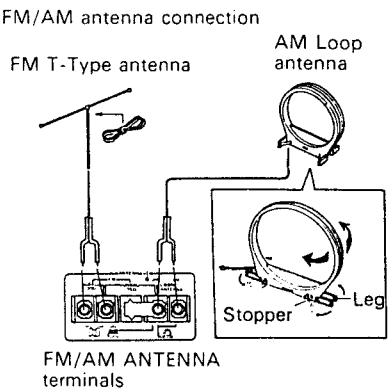
[VIDEO IN]
When monitoring the video image from a VCR used for copying, connect the VIDEO OUTPUT jack of the VCR to this jack.

[AUDIO IN]
When monitoring back the audio channel from a VCR used for copying, connect the AUDIO OUTPUT jack of the VCR to this jack.

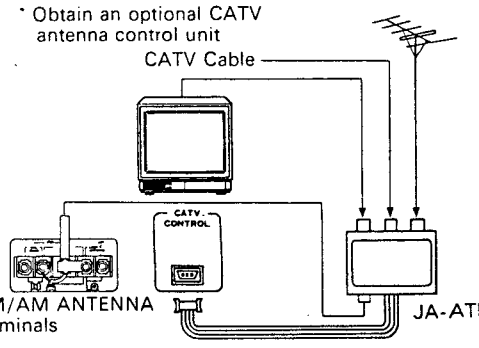
Method using the RF Modulator JA-RF5 and JA-AT5 simultaneously (VSX-2000 only).



Method of connecting antenna to VSX-2000



Method of connecting CATV cable (VSX-2000 only)

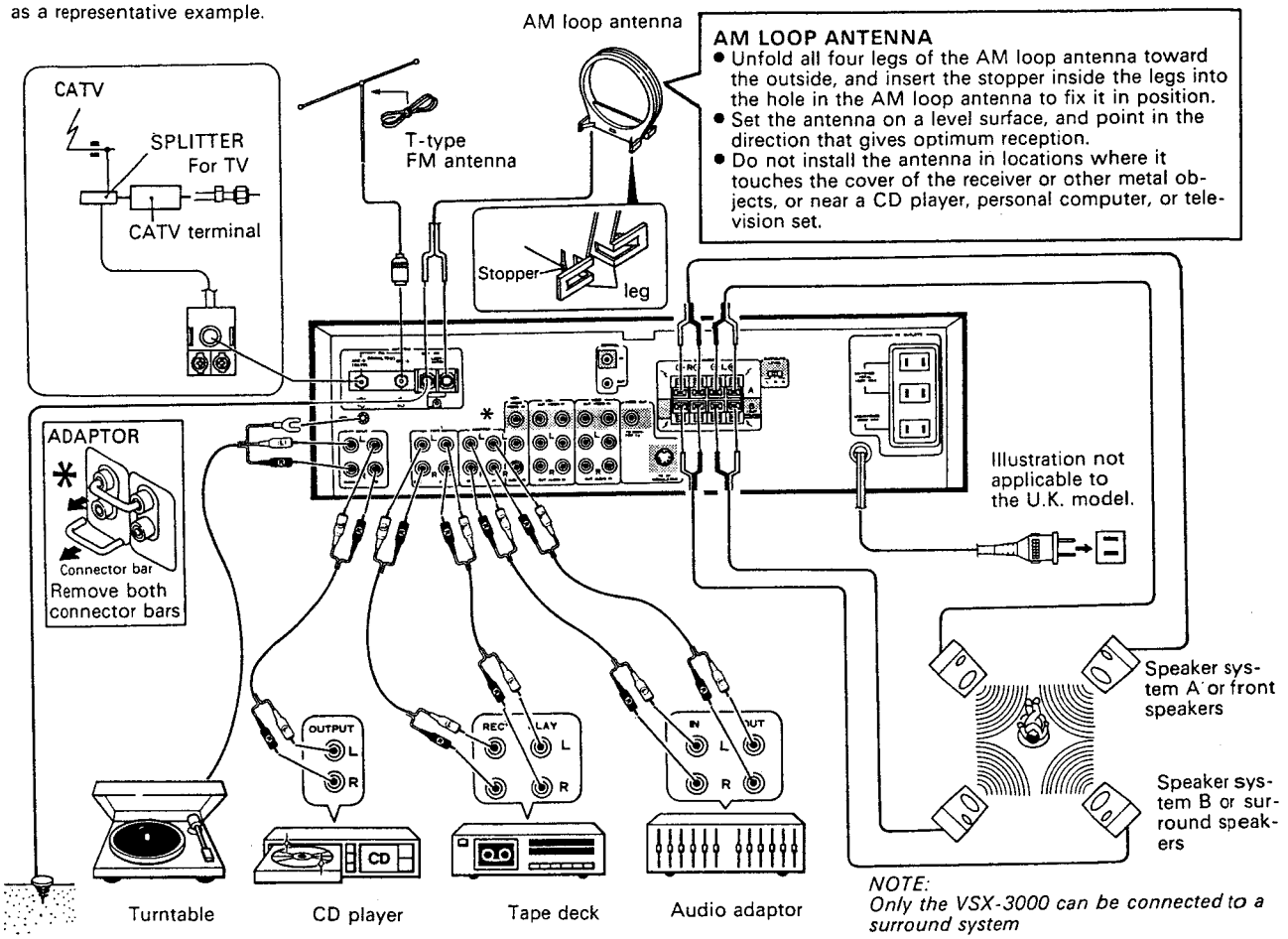


The CATV ANTENNA CONTROL UNIT JA-AT5 is sold separately

〈ARB1045〉

AUDIO SYSTEM CONNECTIONS

The illustration shows a VSX-3000 as a representative example.


AM loop antenna
AM LOOP ANTENNA
• Unfold all four legs of the AM loop antenna toward the outside, and insert the stopper inside the legs into the hole in the AM loop antenna to fix it in position.
• Set the antenna on a level surface, and point in the direction that gives optimum reception.
• Do not install the antenna in locations where it touches the cover of the receiver or other metal objects, or near a CD player, personal computer, or television set.
CATV
SPLITTER
For TV
CATV terminal
T-type
FM antenna
Stopper
leg
ADAPTOR
Connector bar
Remove both connector bars
Illustration not applicable to the U.K. model.
Speaker system A or front speakers
Speaker system B or surround speakers
Turntable
CD player
Tape deck
Audio adaptor

NOTE:
Only the VSX-3000 can be connected to a surround system

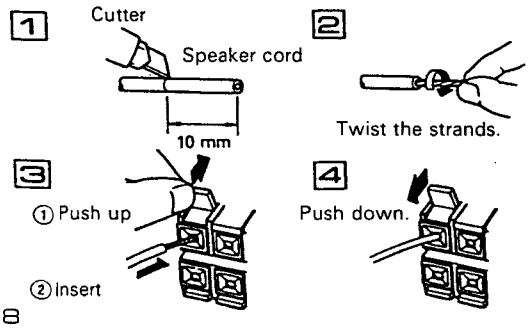
Antenna ground

Although grounding is not necessary for reception it is recommended for protection against damage from lightning if an outdoor FM antenna is used. Grounding is recommended as well, to help reduce noise and hum.

NOTE:
Never make the ground connection to a gas pipe as sparks could cause the gas to ignite.

Audio and video input/output jacks of this unit are dull tin-plated, aiming at high quality.

Connecting the speaker cords



Connecting the input/output cords

When another stereo component (purchased separately) is connected, note the following instructions:

- Connect the plugs properly. Faulty connections can cause noise and also breakdowns and failures.
- The white terminal is for the left channel and the red terminal is for the right channel.

NOTE ABOUT SPEAKER CONNECTIONS

[VSX-3000]

When using either A or B:

- The speaker systems used should have an impedance of between 6 and 16 ohms.

When using A and B simultaneously:

- The speaker systems used should have an impedance of between 12 and 32 ohms.

When using a surround system:

- The speaker systems used should have an impedance of between 8 and 16 ohms.

[VSX-2000]

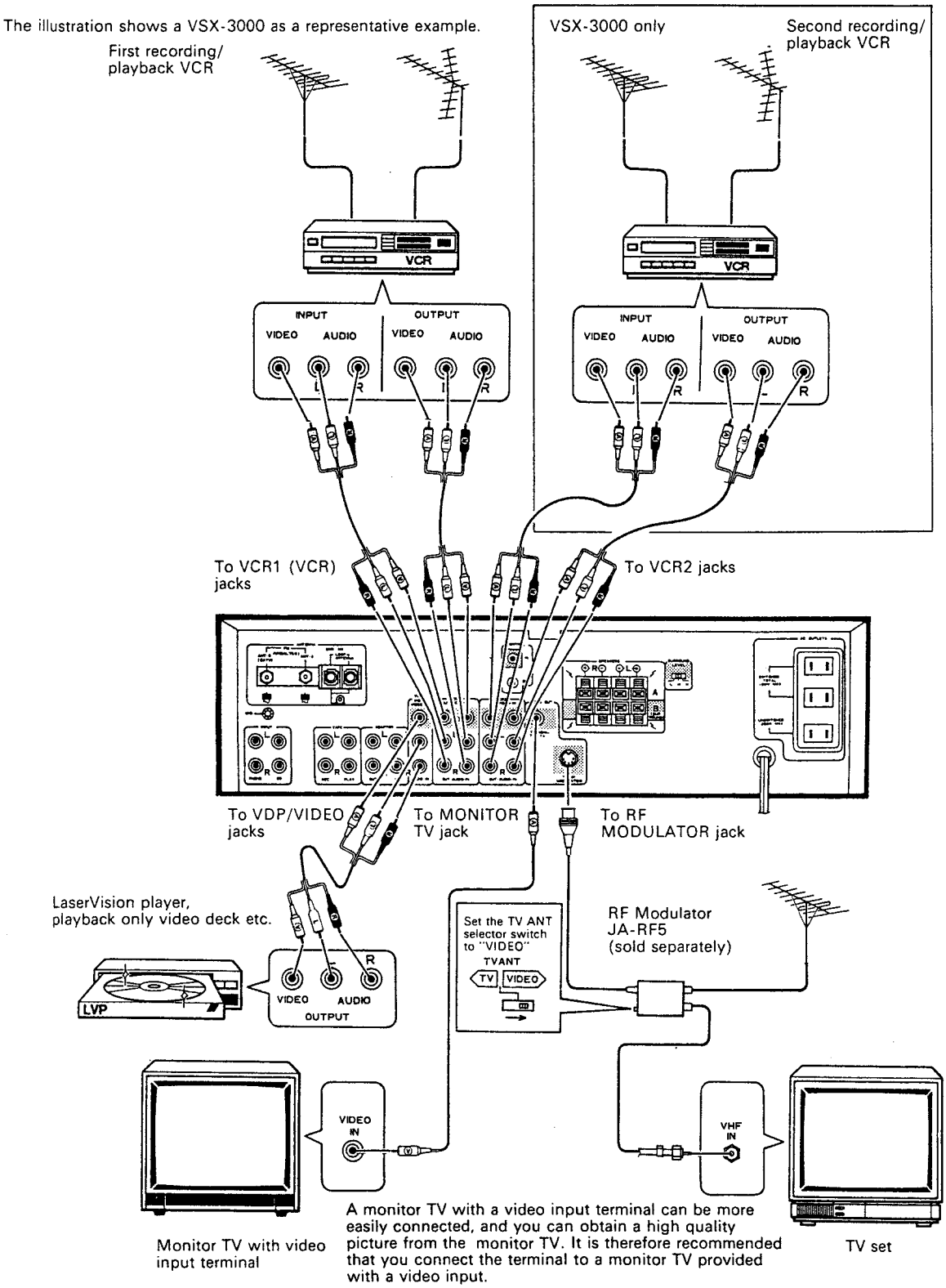
- Speaker systems used should have an impedance of between 6 and 16 ohms

[VSX-3000/VSX-2000]

- Be sure that connections are secure. Check to make sure that wires do not protrude from their terminals.
- Do not allow the speaker cords to become shorted. Damage may result to your unit.
- Do not attempt to simultaneously connect two sets of speakers to a single side (A or B). When using two sets of speakers, connect one set to side A and one set to side B.

〈ARB1045〉

VIDEO SYSTEM CONNECTIONS


The illustration shows a VSX-3000 as a representative example.
First recording/ playback VCR
VSX-3000 only
Second recording/ playback VCR
VCR
INPUT
OUTPUT
VIDEO
AUDIO
To VCR1 (VCR) jacks
To VCR2 jacks
To VDP/VIDEO jacks
To MONITOR TV jack
To RF MODULATOR jack
LaserVision player, playback only video deck etc.
LVP
Set the TV ANT selector switch to "VIDEO"
TVANT
TV
VIDEO
RF Modulator JA-RF5 (sold separately)
VIDEO IN
VHF IN
Monitor TV with video input terminal
A monitor TV with a video input terminal can be more easily connected, and you can obtain a high quality picture from the monitor TV. It is therefore recommended that you connect the terminal to a monitor TV provided with a video input.
TV set

Audio and video input/output jacks of this unit are dull tin-plated, aiming at high quality.

FRONT PANEL FACILITIES

[VSX-3000]
• For details of the VSX-2000, see page 13.

POWER STAND-BY/ON switch
When this switch is pressed, power is supplied to the unit. Press the switch again to turn power off.

VIDEO SIGNAL SELECTOR switch
When recording simulcast programs, the recorded image can be selected from among VCR 1, VCR 2, and VDP/VIDEO. (VCR and VDP/VIDEO only, in the case of VSX-2000)

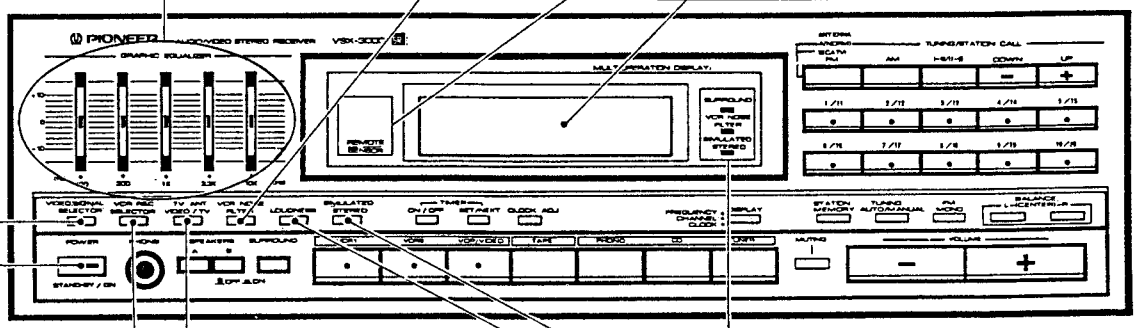
GRAPHIC EQUALIZER controls
The equalizer is divided into five frequency ranges (100 Hz, 330 Hz, 1 kHz, 3.3 kHz, 10 kHz) to tailor music to the individual taste of the listener.

VCR NOISE FILTER switch (VSX-3000 only)
If tape hiss noise is noticeable when performing playback of video cassette tapes, press this switch to reduce the noise. The effectiveness at reducing high-frequency hiss noise varies depends on the type of tape used, the recording level, and other conditions.

NOTE:
- *This switch can be used when one of the video system function switches is selected. In addition, a noise filter can be preset in each of VCR1, VCR2, and VDP/VIDEO. When any other function switch is pressed, the VCR noise filter is automatically canceled.*

REMOTE SENSOR window

MULTI OPERATION DISPLAY panel



TV ANT VIDEO/TV selector switch
This switch can be used in place of the TV ANT switch on the RF Modulator JA-RF5 (sold separately). This is effective only when the JA-RF5's TV ANT switch is set to the VIDEO position. When the unit is switched ON, it will go into the VIDEO mode. For example:

In VIDEO mode:
Allows you to use video components connected to the receiver.

In TV mode:
Connects the TV antenna, thus allowing you to view normal TV broadcasts, regardless of whether the receiver's POWER is ON or OFF.

NOTE:
- *When in the VIDEO mode, no sound will be produced from the TV set's speakers. Listen using the speakers connected to the receiver.*
- *Noise may be produced if the TV set's volume control is turned up. Turn down the set's volume control when listening.*
- *This switch will not function unless you set the TV ANT selector switch of the RF Modulator to "VIDEO".*
- *For model VSX-2000, this is the SIMULATED STEREO switch. Refer to the description at right.*

Operation indicators
- The VSX-3000 has three operation indicators. The VSX-2000 has only a SIMULATED STEREO indicator.

SURROUND: This indicator will light when the SURROUND ON/OFF selector is pressed ON.
VCR NOISE FILTER: This indicator will light when the VCR NOISE FILTER switch is pressed ON.
SIMULATED STEREO: This indicator will light when the SIMULATED STEREO switch is pressed ON.

SIMULATED STEREO switch
This turns monaural signals into simulated stereo sound. Use this when you wish to experience the sense of stereo presence with AM broadcasts, VCR or other monaural signal sources.

NOTE:
This function can also be used with stereo sources, but it will result in a different sound from the normal stereo sound.

LOUDNESS switch (VSX-3000 only)
Press when listening to sound at a low volume level. This will enhance the bass and treble and give more life to the sound even at low volume level.

VCR REC SELECTOR switch (VSX-3000 only)
By selecting this switch, you can copy one video tape onto another while listening to music. (For details, refer to page 23.)

Display indication selector switch:

This function operates only when the audio/video function is set to TUNER.
Each time you press this switch, the display mode will change as shown below.

FREQUENCY → CHANNEL → CLOCK →

FREQUENCY: Indicates the frequency of an FM or AM broadcast.
CHANNEL: Indicates the number of the STATION CALL switch (1 to 20).
- If a station is not memorized in a station call switch, "--CH" will be displayed.

CLOCK : Indicates the present time.
- If the time is not set, the characters will flash. (example "0:00")

TIMER switches

ON/OFF: Press to operate the timer.
SET/NEXT: Use to set the time or timer or to move to the next operation.
CLOCK ADJ: Use to adjust the time.

FM/AM selector switches

These switches are used to select either FM or AM reception.
FM ANT A (NORM)/B (CATV):
Press for FM reception. For FM reception, ANT A (NORM) and ANT B (CATV) are switched over.
AM: Press for AM reception.

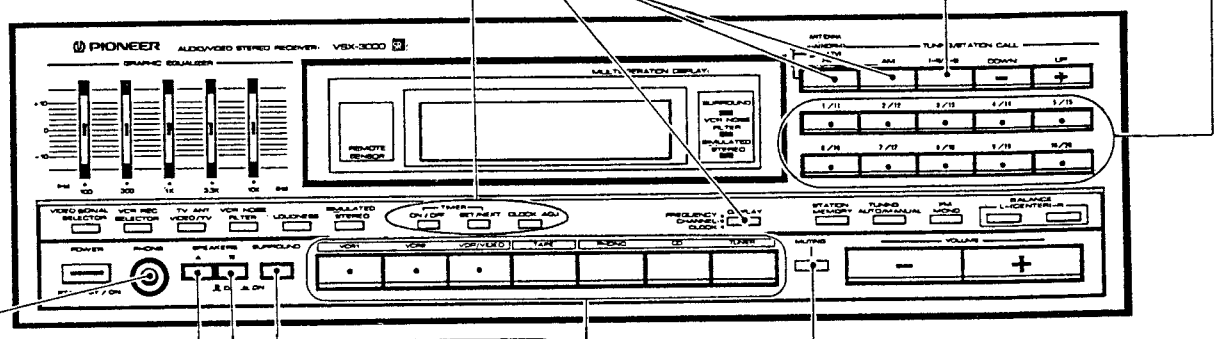
STATION CALL switches

These switches are used to preset and recall desired broadcasting stations, together with the FM MONO mode and FM ANT-A/ANT-B mode.

STATION (1—10/11—20) selector switch

This switch is used to set the STATION CALL switches to either Mode 1 (1—10) or Mode 2 (11—20). When Mode 1 (1 to 10) is selected, the "1—10" indicator will light; when Mode 2 (11 to 20) is selected, the "11 -20" indicator will light.

NOTE:
Changing the position of this switch has no effect on receiver performance itself.



SPEAKERS switches (■OFF, ▬ON)

These are used to select the speaker through which you wish to listen.
A: When the speakers connected to A terminals are in use.
B: When the speakers connected to B terminals are in use.
- Turn both A and B speakers to OFF position when only the HEADPHONES are in use.

PHONES jack

Connect the plug on your headphones to this jack. To listen to a program through the headphones, set both SPEAKERS A and B switches to the OFF position.

SURROUND selector switch (■OFF, ▬ON) (VSX-3000 only)

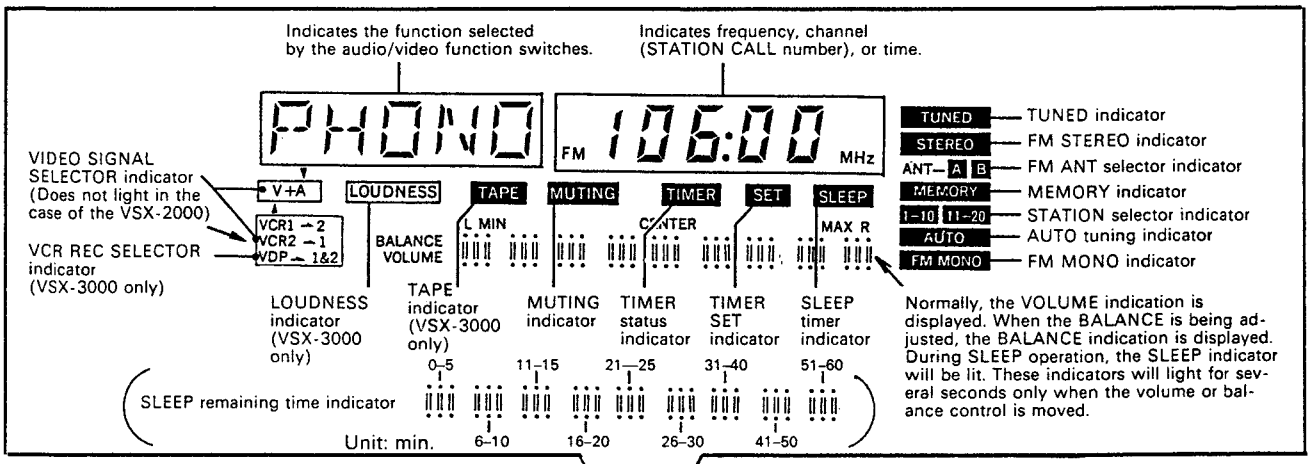
By pressing the A and B SPEAKERS switches, then pressing this switch ON, you can obtain surround reproduction. If you press this switch OFF again, normal reproduction from both speakers A and B will be obtained.

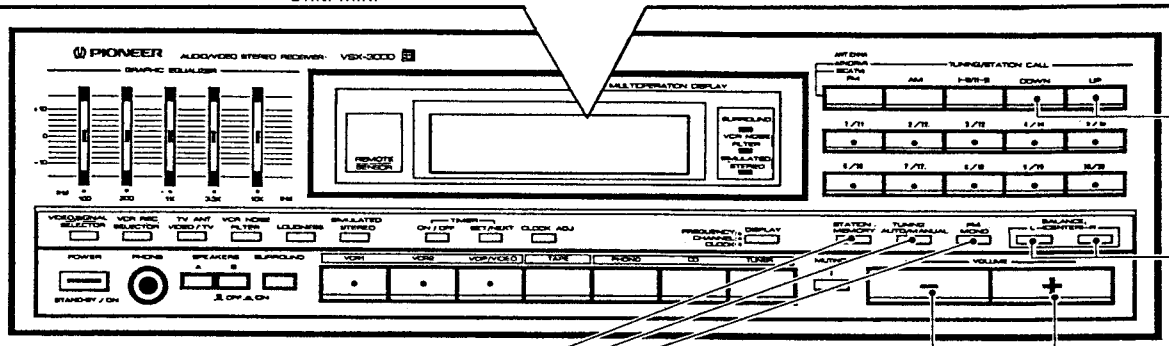
MUTING switch

Press to temporarily mute the sound. When pressed again, the sound will return to its previous level.

Audio/video function switches (VSX-3000 only)

VCR 1: Press when performing playback on a VCR unit.
VCR 2: Press when performing playback on a second VCR unit.
VDP/VIDEO: Press when performing playback on a LaserVision player (VDP) or third VCR.
TAPE: Press when performing playback on a tape deck and when monitoring recording.
PHONO: Press when playing records on a turntable.
CD: Press when playing compact discs on a CD player.
TUNER: Press when listening to a radio broadcast.





STATION MEMORY switch

This is used to memorize stations. The FM MONO mode and FM ANT-A/ANT-B mode will also be memorized. When the switch is pressed, the MEMORY indicator will light. To memorize the frequency of any station, press the STATION CALL switch while the MEMORY indicator is lit.

TUNING AUTO/MANUAL switch

Use this switch to select either the AUTO mode or the MANUAL mode.
When the "AUTO" indicator is lit, the receiver is in the AUTO mode.

FM MONO selector switch

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator is lighted.

Auto stereo mode:

Normally leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo sound.

Monaural mode:

When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:

This switch has no effect on reception of AM broadcasts.

VOLUME control switches

Press the "–" or "+" switch to control the volume.
+: Used to increase the volume.
–: Used to reduce the volume.

BALANCE control switches

Use to adjust the sound volume balance between left and right speakers.
L: Press to decrease the sound on the right side.
R: Press to decrease the sound on the left side.
CENTER: When L and R are pressed simultaneously, the display will return to the center.

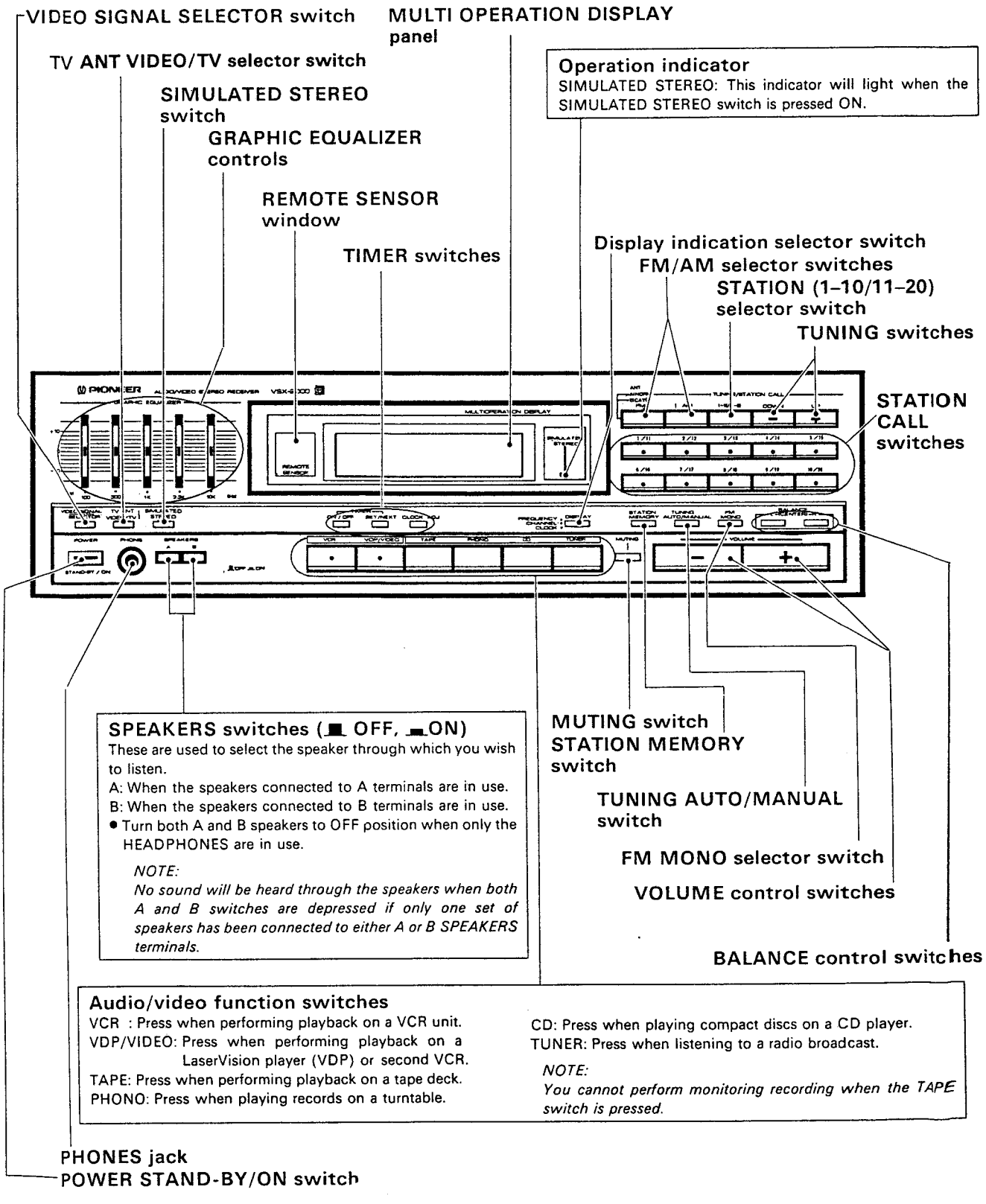
TUNING switches (DOWN, UP)

These switches are used to raise or lower the tuning frequency in the FM or AM band, raise or lower the channel number memorized in the STATION CALL switches, and raise or lower the hours and minutes indication when setting the timer or the time display.

UP : • The FM or AM band is scanned in the direction of increasing frequency.
• The STATION CALL switches are scanned in the direction of increasing switch number (channel).
• The hours and minutes are scanned in the direction of increasing time.

DOWN : The opposite operation to that of the UP switch takes place.

[VSX-2000]
● For details of the VSX-3000, see pages 10-12.


VIDEO SIGNAL SELECTOR switch
MULTI OPERATION DISPLAY panel
TV ANT VIDEO/TV selector switch
SIMULATED STEREO switch
GRAPHIC EQUALIZER controls
REMOTE SENSOR window
TIMER switches
Operation indicator
SIMULATED STEREO: This indicator will light when the SIMULATED STEREO switch is pressed ON.
Display indication selector switch
FM/AM selector switches
STATION (1–10/11–20) selector switch
TUNING switches
STATION CALL switches
SPEAKERS switches (■ OFF, ▬ ON)
These are used to select the speaker through which you wish to listen.
A: When the speakers connected to A terminals are in use.
B: When the speakers connected to B terminals are in use.
● Turn both A and B speakers to OFF position when only the HEADPHONES are in use.
NOTE:
No sound will be heard through the speakers when both A and B switches are depressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.
MUTING switch
STATION MEMORY switch
TUNING AUTO/MANUAL switch
FM MONO selector switch
VOLUME control switches
BALANCE control switches
Audio/video function switches
VCR : Press when performing playback on a VCR unit.
VDP/VIDEO: Press when performing playback on a LaserVision player (VDP) or second VCR.
TAPE: Press when performing playback on a tape deck.
PHONO: Press when playing records on a turntable.
CD: Press when playing compact discs on a CD player.
TUNER: Press when listening to a radio broadcast.
NOTE:
You cannot perform monitoring recording when the TAPE switch is pressed.
PHONES jack
POWER STAND-BY/ON switch

REMOTE CONTROL UNIT OPERATION

In addition to the present unit, the remote control unit can also be used to operate other Pioneer components (TV, VCR, VDP, Turntable, Tape deck or CD) bearing the SR mark.

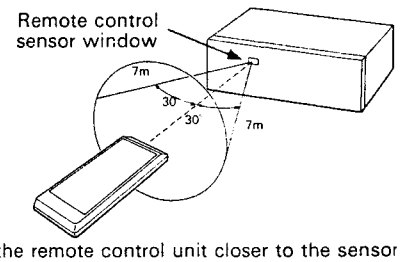
Range of remote control

When the remote control unit is pointed at the remote control sensor window on the receiver and any of its keys is pressed, the unit and other components can be operated by remote control.

Distance: Within a range of about 7 meters from the unit's remote control sensor window

Angle: Within approx. 30 degrees from the center of the unit's remote control sensor window

Remote control will not be possible if there is an obstacle between the remote control unit itself and the unit's remote control sensor window.



Bringing the remote control unit closer to the sensor window increases the angle that enables remote control.

Remote control unit for VSX-3000

SLEEP key
Press to enable the sleep timer function. Each time the key is pressed, the timer function alternates in the following order:

60 → 30 → OFF

Units: Minutes

RECEIVER POWER Key

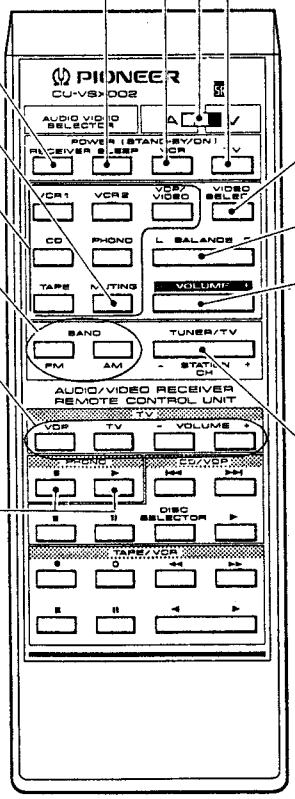
MUTING key

Audio/Video function keys

BAND selector keys
Used to select an FM or AM broadcast.

TV keys
VDP ... Sets the TV set function to VDP.
TV ... Sets the TV set function to TV.
+ ... Increases the TV set's sound volume.
– ... Reduces the TV set's sound volume.

PHONO keys
► (PLAY) ... For performing record playback.
■ (STOP) ... To stop record playback.



VCR power key
Use to turn power ON/OFF to a VCR.

A/V SELECTOR switch

TV power key
Use to turn power ON/OFF to a TV.

VIDEO SELECT key
Has the same function as the VIDEO SIGNAL SELECTOR switch.

BALANCE key
NOTE:
The balance will not move to the center when the L side and R side are pressed simultaneously.

VOLUME key

TUNER STATION CH key (When the A/V selector is "A")
The channel which is memorized in the STATION CALL switch will be received.
+: The STATION CALL switches will light sequentially in ascending order of channel numbers.
–: The STATION CALL switches will light sequentially in descending order of channel numbers.

NOTE:
You cannot receive a radio broadcast by using the BAND selector keys without selecting the FM or AM function using the BAND selector key.

TV STATION CH key (When the A/V selector is "V")
+: Selects channels in ascending order.
–: Selects channels in descending order.

CD keys (When the A/V selector is "A")

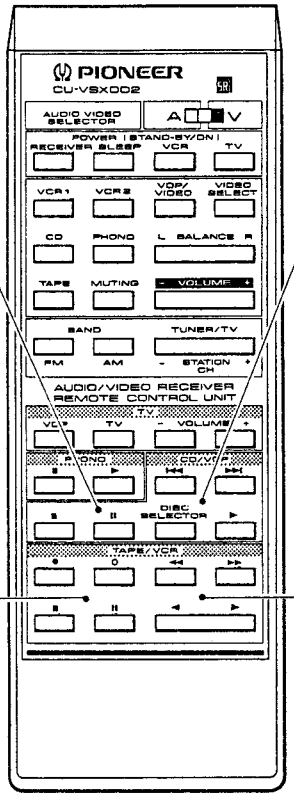
►►I (Track search) ... When pressed once, play advances to the beginning of the next track; when pressed continuously, advances to further tracks.
I◄◄ (Track search) ... When pressed once, returns to the beginning of the currently playing track; when pressed continuously, returns to earlier tracks.
► (Play) ... Begins playback.
DISC SELECTOR ... Used to select disc number (1–6) for playback.

NOTE:
Note that DISC SELECTOR key on the accessory remote control unit may not function, depending on the CD player used.

■■ (Pause) ... Press to temporarily pause playback.
■ (Stop) ... Press to stop playback.

TAPE keys (When the A/V selector is "A")

►► (Fast) ... Winds the tape quickly from left to right.
◄◄ (Fast) ... Winds the tape quickly from right to left.
O (Mute) ... Press to eliminate unwanted portions during recording, or to create a non-recorded interval between selections.
● (REC) ... Press to begin recording.
► (Play) ... Press for forward-direction recording or playback.
◄ (Play) ... Press for reverse-direction recording or playback.
■■ (Pause) ... Press to temporarily pause recording or playback.
■ (Stop) ... Press to stop tape travel and recording.



VDP (LaserVision player) keys (When the A/V selector is "V")

►►I (Scan) ... Scanning in forward direction
I◄◄ (Scan) ... Scanning in reverse direction
► (Play) ... Switches the mode from stop (disc not rotating) to normal playback. Returns the mode from pause, still-frame, or multi-speed playback to normal playback. Starts chapter program playback.
■■ (Pause) ... When pressed, picture and sound vanish and playback is temporarily interrupted. Press again to release the pause mode.
■ (Stop) ... Stops playback.

NOTE:
The DISC SELECTOR key does not function with VDP.

VCR keys (When the A/V selector is "V")

►► (FF) ... Advances the tape quickly.
◄◄ (REW) ... Rewinds the tape quickly.
● (REC) ... Begins recording.
► (PLAY) ... Begins playback.
■■ ... Temporarily interrupts playback or recording.
■ (Stop) ... Stops tape travel.

NOTE:
The O and ◄ keys do not function with VCR.

To control a unit other than this receiver using the remote controller provided

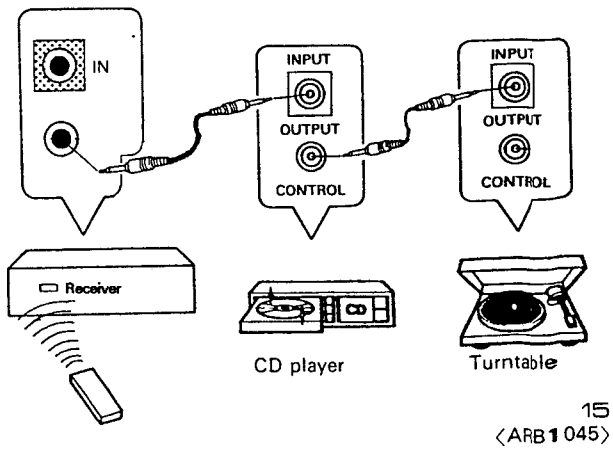
① In the case of a PIONEER unit marked SR which is provided with a remote sensor, operate the unit by aiming the remote controller at the remote sensor on the unit.

② For units with the SR mark, but without a remote sensor, as well as for units with the SR mark and a remote sensor etc., operation of the unit by facing the remote control unit towards the remote sensor of this unit is possible with connection from the CONTROL OUT jack to the CONTROL IN jack.
Use a commercially available cable with mini-plugs for the connection.

NOTE:
The remote sensor of the unit with connection to the CONTROL IN jack may become inoperative.

Connections for remote control

When a remote control unit is connected to a PIONEER stereo component provided with a control input (CONTROL IN) jack, this system can then be operated by the accessory remote control unit. Use the remote control cord which comes with the respective unit for the connection. An example is shown in the drawing below. So long as you connect "OUT" → "IN", the connecting sequence is arbitrary. In the case of a unit which has only an "IN" connector, however, make connection to it last.Even when using these connections, if a remote control unit is provided with your stereo equipment, you can operate the remote control unit by facing it towards the remote control sensor on the receiver.



Remote control unit for VSX-2000

SLEEP key
Press to enable the sleep timer function. Each time the key is pressed, the timer function alternates in the following order:

60 → 30 → OFF

Units: Minutes

RECEIVER POWER key

Video function keys

BAND selector keys
Used to select an FM or AM broadcast.

TUNER STATION CH key (When the A/V selector is "A")
The channel which is memorized in the STATION CALL switch will be received.

+ : The STATION CALL switches will light sequentially in ascending order of channel numbers.

– : The STATION CALL switches will light sequentially in descending order of channel numbers.

NOTE:
You cannot receive a radio broadcast by using the BAND selector keys without selecting the FM or AM function using the BAND selector key.

CD keys (When the A/V selector is "A")
DISC SELECTOR ... Used to select disc number (1–6) for playback.

NOTE:
Note that DISC SELECTOR key on the accessory remote control unit may not function, depending on the CD player used.

▶▶| (Track search) ... When pressed once, play advances to the beginning of the next track; when pressed continuously, advances to further tracks.

|◀◀ (Track search) ... When pressed once, returns to the beginning of the currently playing track; when pressed continuously, returns to earlier tracks.

▶ (Play) ... Begins playback.

■ (STOP) ... Press to stop playback.

TAPE keys (When the A/V selector is "A")
▶▶ (Fast) ... Winds the tape quickly from left to right.

◀◀ (Fast) ... Winds the tape quickly from right to left.

▶ (Play) ... Press for forward-direction recording or playback.

■ (Stop) ... Press to stop tape travel and recording.

VIDEO SELECT key
Has the same function as the VIDEO SIGNAL SELECTOR switch.

A/V SELECTOR switch

VOLUME key

MUTING key

TV STATION CH key (When the A/V selector is "V")
+ : Selects channels in ascending order.

– : Selects channels in descending order.

VDP (LaserVision player) keys (When the A/V selector is "V")
▶▶| (Scan) ... Scanning in forward direction

|◀◀ (Scan) ... Scanning in reverse direction

▶ (Play) ... Switches the mode from stop (disc not rotating) to normal playback.
Returns the mode from pause, still-frame, or multi-speed playback to normal playback. Starts chapter program playback.

■ (Stop) ... Stops playback.

NOTE:
The DISC SELECTOR key does not function with VDP.

VCR keys (When the A/V selector is "V")
▶▶ (FF) ... Advances the tape quickly.

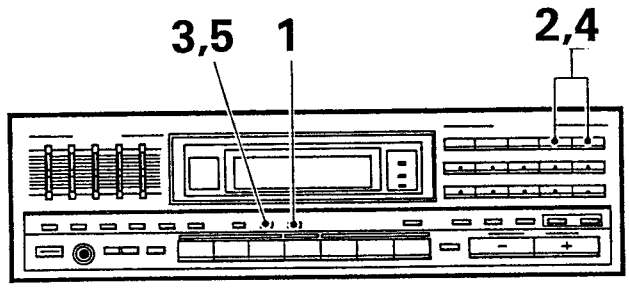
◀◀ (REW) ... Rewinds the tape quickly.

▶ (PLAY) ... Begins playback.

■ (Stop) ... Stops tape travel.

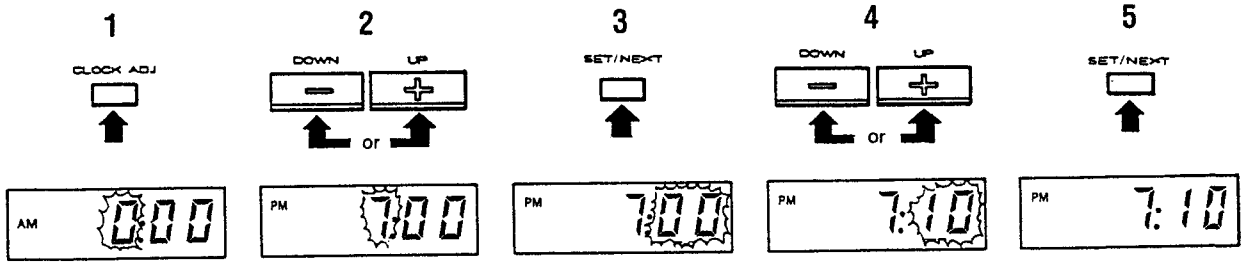
SETTING THE CLOCK TIME

The clock of this receiver has a 12-hour display which is divided into AM and PM.
Example: Setting the clock to 7:10 PM.



1. Press the CLOCK ADJ. switch.
2. Using the TUNING switches, set the "hours".
3. Press the SET/NEXT switch.
4. Using the TUNING switches, set the "minutes".
5. Press the SET/NEXT switch.

- 00 seconds will be set, and the clock will start operating.



- To bring up the time display, press the DISPLAY switch and select the time.

NOTE:
In the event of a power failure, the time at which the power failure occurred will appear as a flashing display. In this case, reset the clock.

GRAPHIC EQUALIZER CONTROLS

The advantage of the GRAPHIC EQUALIZER over conventional tone controls is that with the five controls of the GRAPHIC EQUALIZER it is possible to control five different narrow, distinct sections of the audio band. With conventional tone controls a setting for a bass or treble boost or cut will also affect the lower or upper mid frequencies. The frequency bands controlled by the five slide controls have been chosen to yield the maximum possible control action within the audio spectrum.

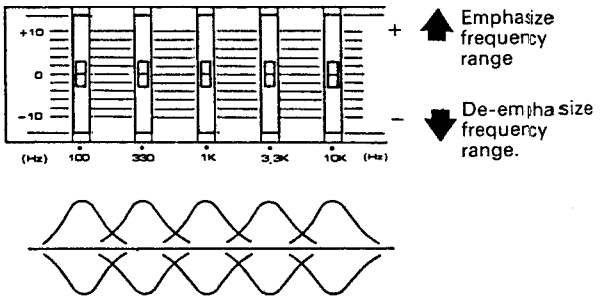
100 Hz: The 100 Hz control is very useful in enhancing low bass notes as in organ music.

330Hz: The 330 Hz control will allow you to vary the upper bass frequencies.

1 kHz: The 1 kHz control is the presence control and can be used very effectively to emphasize, or de-emphasize vocalists.

3.3 kHz: The 3.3 kHz control will add brilliance and clarity to brass instruments and violins.

10 kHz: The 10 kHz control can be used to make up for missing high frequencies absorbed by the environment and to add a natural crispness to music.

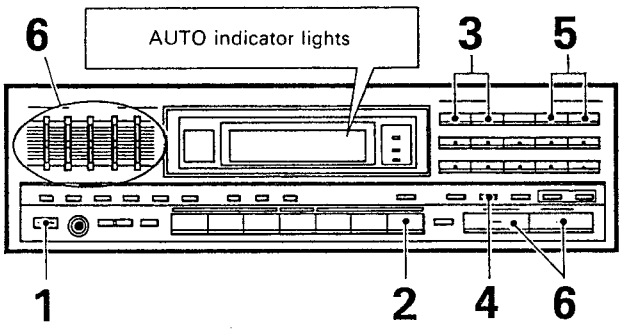


LISTENING TO THE BROADCAST

- Check that all terminals are properly connected before switching on the unit.

AUTO TUNING

The electronic tuning circuit inside the unit will search for your desired station automatically.



1 Turn on the POWER switch of the unit.

2 Press the TUNER switch of the audio/video function switches.

3 Select your desired broadcasting band using the FM/AM selector switches.

When you wish to receive an FM broadcast, select FM ANT-A or FM ANT-B.

4 Press the TUNING AUTO/MANUAL switch to establish the AUTO tuning mode (the AUTO tuning indicator lights).

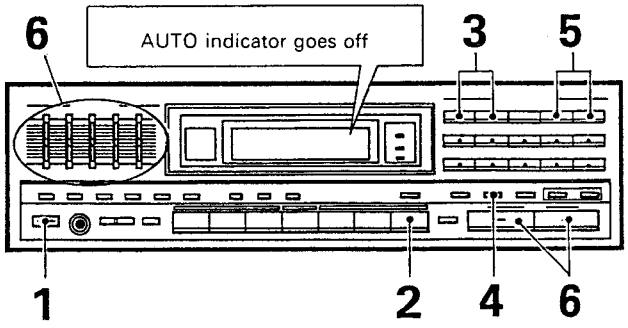
5 Press the TUNING switches "DOWN" or "UP" for a lower or higher frequency as desired.

The frequency will change rapidly during scanning. The AUTO TUNING will stop automatically when the station is located and the TUNED indicator will light up.

NOTE:
When the AUTO TUNING is in use, reception may not be possible over long distances or when signals are weak. At these times manual tuning is recommended.

6 Adjust the volume with the VOLUME control and the tone with the GRAPHIC EQUALIZER controls.

MANUAL TUNING



1 Turn on the POWER switch of the unit.

2 Press the TUNER switch of the audio/video function switches.

When you wish to receive an FM broadcast, select FM ANT-A or FM ANT-B.

3 Select your desired broadcasting band using the FM/AM selector switches.

When you wish to receive an FM broadcast, select FM ANT-A or FM ANT-B.

4 Press the TUNING AUTO/MANUAL switch to establish the MANUAL tuning mode (the indicator goes off).

5 Use the TUNING switches to locate the frequency of your desired station.

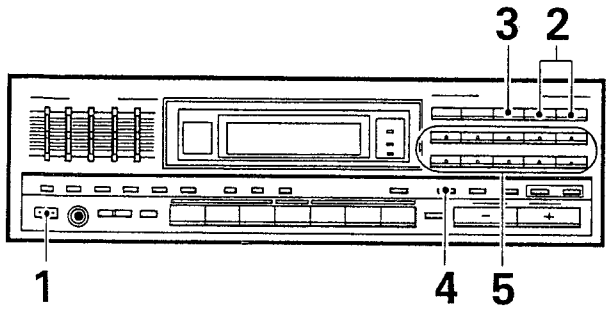
For step-by-step searching, press the TUNING switch once and release it immediately. For continuous rapid scanning keep the TUNING switch pressed. The TUNED indicator will light up when the desired station is tuned in best.

NOTE:
The TUNED indicator will not function for broadcasts received over long distances or when signals are weak.

6 Adjust the volume with the VOLUME control and the tone with the GRAPHIC EQUALIZER controls.

PRESETTING STATIONS

PRESETTING



1 Turn on the POWER switch of the unit.

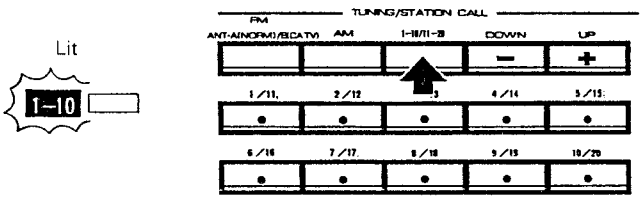
2 Tune in desired station.

- See the AUTO TUNING section for information on reception using Auto Tuning.
- See the MANUAL TUNING section for information on reception using Manual Tuning.

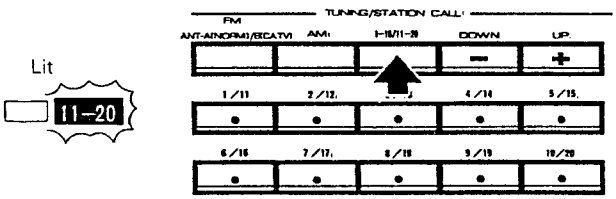
When you memorize an FM broadcast, the setting of the FM MONO selector switch (auto stereo mode or monaural stereo mode) and the FM antenna switch (ANT-A/ANT-B) will be memorized as well.

3 Press the STATION (1—10,11—20) selector switch to select Mode 1 or Mode 2.

When presetting using Mode 1 STATION CALL switches:



When presetting using Mode 2 STATION CALL switches:



4 Press the STATION MEMORY switch.

- The MEMORY indicator lights.

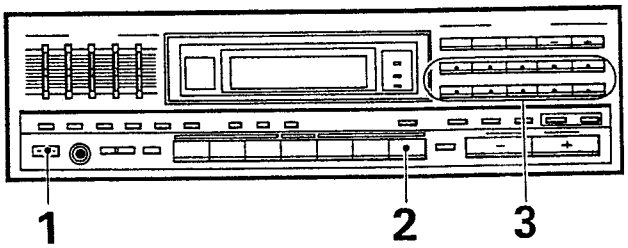
5 Press the STATION CALL switch into which you wish to preset the station.

- When the MEMORY indicator goes out, presetting is no longer possible. Press the STATION MEMORY switch again to perform presetting.

6 Repeat steps 2 to 5 to preset stations into switches 1 through 20.

Up to 20 AM and FM stations may be preset. If you accidentally preset a station into a STATION CALL switch which contains information, it will be erased and the new station will be entered instead.

RECEPTION USING PRESET TUNING



1 Turn on the POWER switch of the unit.

2 Press the TUNER switch of the audio/video function switches.

3 Press the STATION CALL switch into which the desired station has been preset. (When necessary, do not neglect to perform Station Mode selection as well.)

Tuning can be performed simply and accurately by following the above procedure.

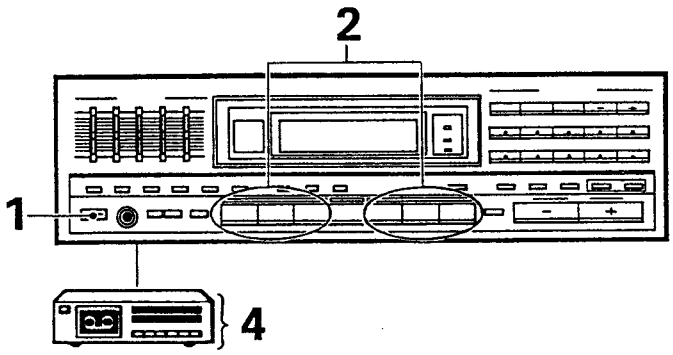
NOTE:
If a preset station has been erased , consult with a Pioneer authorized service station.

Last station memory

- When the POWER switch is pressed to turn power on, the last station received before the power was previously turned off will be received again.
- When power is ON, if the FM/AM selector switch is pressed, the last station received before the FM/AM selector switch was previously pressed will be received again.

TO PERFORM RECORDING WITH A TAPE DECK

TAPE RECORDING



You can record an FM or AM broadcast, or a sound source connected to the PHONO, CD, VDP/VIDEO, VCR 2 or VCR 1 (VCR) jacks.

1 Turn on the POWER switch of the unit.

2 Select the sound source to be recorded.

3 Turn on (or start) the sound source to be recorded.

4 Operate the tape deck connected to the TAPE jacks.

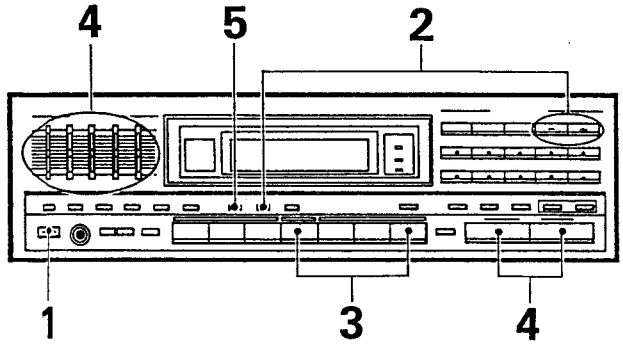
- For details of operating the tape deck, read the operating instructions of the tape deck.

Tape monitoring (VSX-3000 only)
If a recording is being made on a 3-head tape deck, the recorded sound can be monitored through the speaker systems if the TAPE switch is pressed, depending on which TAPE jacks the tape deck is connected to. In this case, both recording and playback connections must be made.

NOTE:
If you have a 2-head open-reel deck or cassette deck, you will not be able to monitor the recorded sound even if you press the TAPE switch. However, you will be able to hear the program source sound.

USING THE BUILT-IN TIMER

Insert the power plug of the tape deck into the "SWITCHED" AC output.
You can perform "wake-up" playback or "unattended" recording using the tape deck. The timer can switch the system ON and OFF once in 24 hours.



"Wake-up" playback (broadcast receiving or tape playback)

1 Turn on the POWER switch of the unit.

- When the unit is switched OFF, only the timer can be set.

2 Set the ON and OFF times of the timer switch.

- Regarding the method of setting the timer, refer to the figure in the next page.

3 Select the program source to be played.

Broadcast receiving: Press the TUNER switch of the audio/video function switches, and select the broadcast which you wish to receive when the timer goes ON.

- For details of receiving a broadcast, refer to pages 18 and 19.

Tape playback: Press the TAPE switch of the audio/video function switches to advance the tape in the tape deck to the beginning of the portion to be played back.

4 Set the volume and tone at which you wish the tape to be played when the timer goes ON.

5 Press the TIMER ON/OFF switch.

- The receiver will be switched off, and the TIMER indicator will light.
- When the TIMER indicator is lit, the timer is operating.

"Unattended" recording using a tape deck

1 Turn on the POWER switch of the unit.

- When the unit is switched OFF, only the timer can be set.

2 Set the ON and OFF times of the timer switch.

- Regarding the method of setting the timer, refer to the figure in the next page.

3 Press the TUNER switch of the audio/video function switches, and select the broadcast which you wish to record when the timer goes ON.

- Switch ON your tape deck and put it in the timer recording mode.

4 Set the volume to minimum (MIN).

- This is to prevent sound from being emitted from the speakers when the timer goes ON.

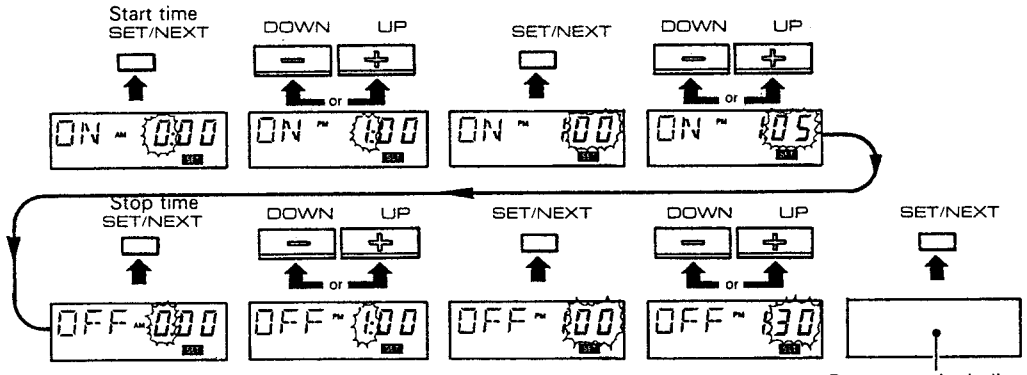
5 Press the TIMER ON/OFF switch.

- The receiver will go off and the TIMER indicator will light.
- While the TIMER indicator is lit, the timer is operating.

NOTE:

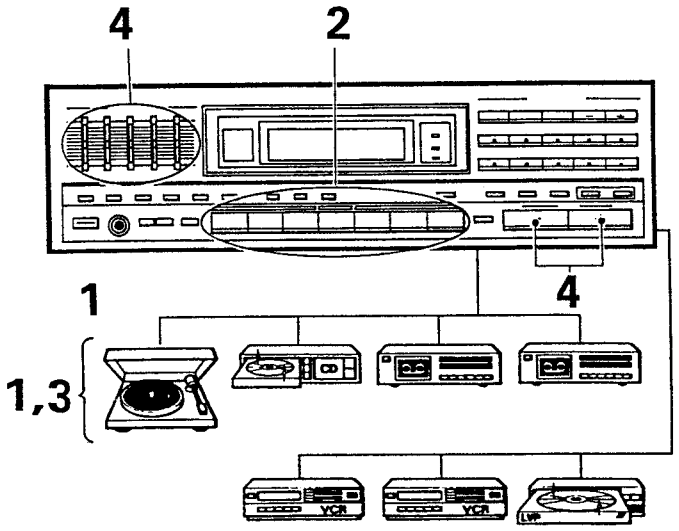
- *Apart from when the unit is in the SLEEP mode, the power will be cut off when the TIMER ON/OFF switch is pressed.*
- *You cannot set the timer when the time is not set (flashing).*
- *If the ON and OFF times of the timer are the same, the TIMER ON/OFF switch will not function.*

Example: Setting the timer between 1 : 05 PM and 1 : 30 PM
Set both the ON time and OFF time of the timer. Operate each switch while the corresponding indication is flashing.



Returns to the indication that was displayed prior to setting.

PLAYING OTHER MUSIC SOURCES



Program Source	Audio/video function switch
To listen to record	PHONO
To listen to compact discs	CD
To listen to a tape on the tape deck connected to TAPE jacks	TAPE
To watch a video cassette tape on the VCR connected to VCR 1 (VCR) jacks	VCR 1 (VCR)
To watch a video cassette tape on the VCR connected to VCR 2 jacks	VCR 2
To watch a video disc on a video disc player	VDP/VIDEO
To watch a video cassette tape on the VCR connected to VDP/VIDEO jacks	VDP/VIDEO

1 Turn on the POWER switch of the unit. Also turn on the power of the other audio components you wish to use.

2 Use the audio/video function switches as required to select the desired program source.

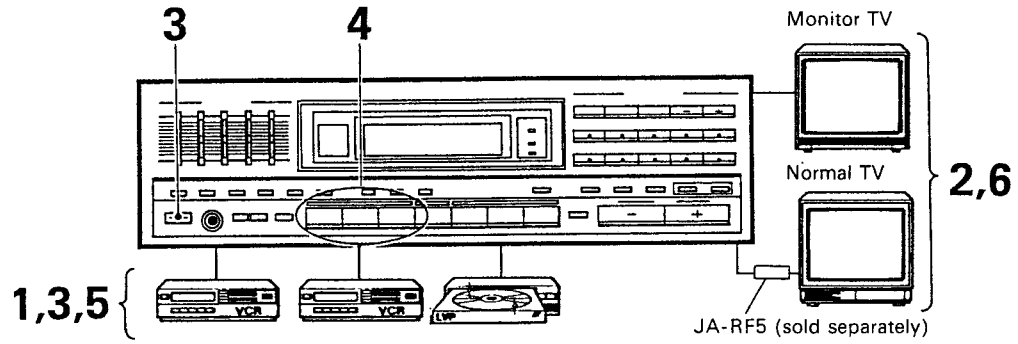
VSX-3000 only:

* Before selecting an audio/video function switch, turn TAPE OFF.

3 Operate the appropriate stereo component to play back the program source.

4 Adjust the volume with the VOLUME control and the tone with the GRAPHIC EQUALIZER controls.

USING A TV SET TO WATCH PROGRAMS FROM CONNECTED VIDEO COMPONENTS



1 **Connect the video components to the VCR 1, VCR 2, or VDP/VIDEO jacks.**

2 **Connect the TV sets.**

- When using a normal TV set:
  Connect to the TV set using the RF modulator JA-RF5 (sold separately).
- When using a TV set equipped with video input terminals, or a monitor TV:
  Connect the monitor TV to the appropriate receiver's MONITOR TV jacks.

3 **Turn on the POWER switch of the unit. Also turn on the power to the stereo components you wish to use.**

4 **Set the audio/video function switch to the appropriate video component to be played back.**

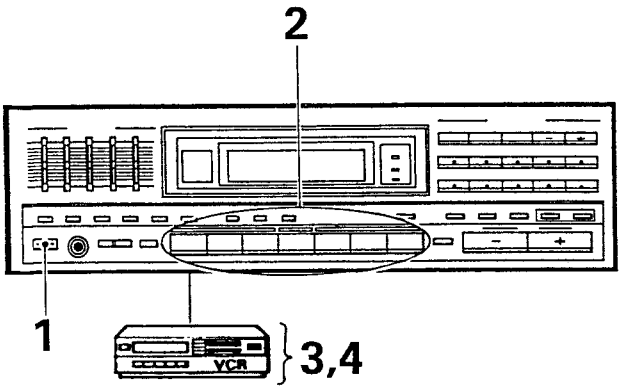
5 **Play back the video component.**

6 **Operate the TV set to display the playback picture.**

- When using normal TV sets, use the RF modulator JA-RF5 (sold separately), and set the TV set's channel to the same open channels selected on the RF modulator.
- When using a TV set equipped with video input terminals, set to the video input playback mode.

Hi-Fi VIDEO RECORDING

Refer to the connection procedures on pages 7 and 8, and refer to the Hi-Fi VCR's Operating Instructions regarding proper operation procedures. Recording can be performed on both VCR 1 and VCR 2. (VCR only, in the case of VSX-2000)



1 **Turn on the POWER switch of the unit. Also turn on the power to the Hi-Fi VCR.**

2 **Use the audio/video function switch to select the desired program source.**

To choose a radio tuner program source, press the desired STATION CALL switch if the station has been preset. If the desired station has not been preset, tune in the station using Auto or Manual tuning.

3 **Insert a video cassette for recording into the Hi-Fi VCR and adjust the recording level. For details, consult the Operating Instructions for the Hi-Fi VCR used.**

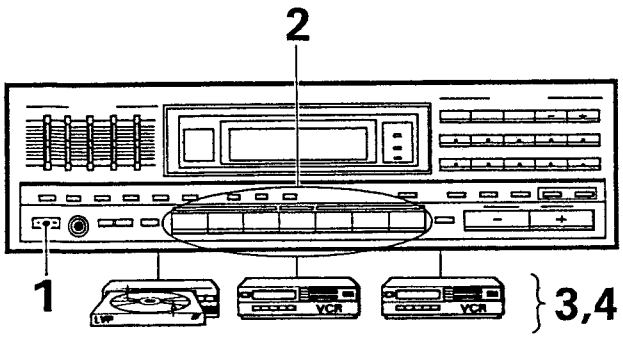
4 **Start the program source and set the VCR to the recording mode.**

- The volume, balance, and tone controls have no effect on the recording.

NOTE:
Recording cannot be performed on a VCR connected to the VDP/VIDEO jacks.

VIDEO TAPE COPYING

Standard method



VSX-3000:
Copying can be performed in either direction between VCR 1 and VCR 2. VCR 1 ⇄ VCR 2.
In addition, two identical copies can be performed from a program source connected to the VDP/VIDEO jacks. VDP/VIDEO → VCR 1/VCR 2

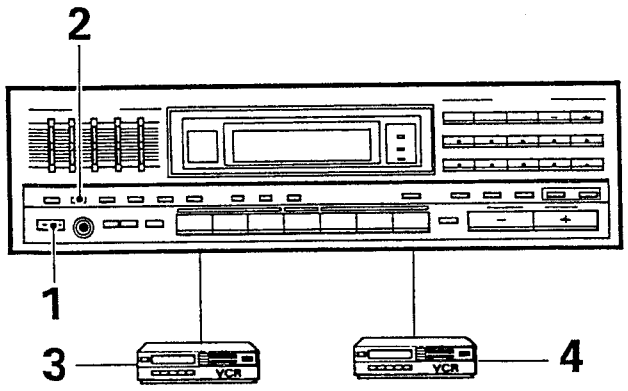
NOTE:
In this case, copying cannot be performed in the opposite direction (VCR 1, 2 to VDP/VIDEO).

VSX-2000:
You can copy from equipment connected to the VDP/VIDEO jacks to equipment connected to the VCR jacks.

NOTE:
In this case, copying cannot be performed in the opposite direction (VCR to VDP/VIDEO).

1 **Turn on the POWER switch of the unit. Also turn on the power to the Hi-Fi VCR.**
2 **Set the audio/video function switch to the VCR to be used for playback.**
3 **Set the playback VCR to the playback mode.**
4 **Set the recording VCR to the recording mode.**

Convenient operation using VCR REC SELECTOR (VSX-3000 only)

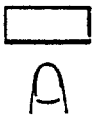


For normal video tape copying, the audio/video function switch corresponding to the video deck to be played is selected, hence during tape copying, no other operation can be performed. In this case, by using VCR REC SELECTOR, you can perform video tape copying while listening to a radio broadcast or a record.

1 **Turn on the POWER switch of the unit. Also, turn on the power to the components which you wish to use.**
2 **Using the VCR REC SELECTOR switch, select the copying method.**

Each time the switch is pressed, the indication successively changes.

VCR REC SELECTOR

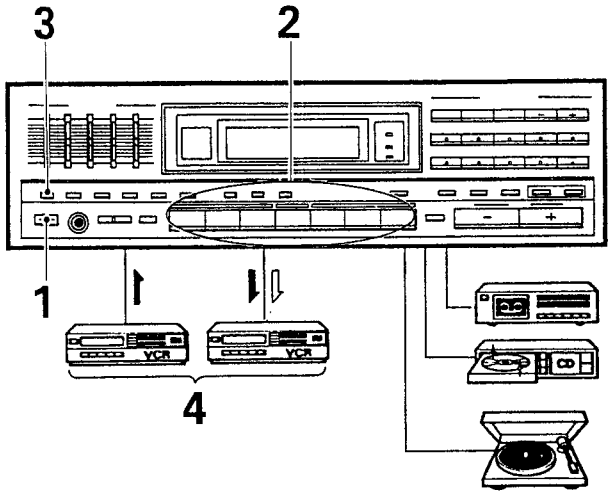


VCR1 → 2: When copying from VCR1 to VCR2
VCR2 → 1: When copying from VCR2 to VCR1
VDP → 1 & 2: When copying from VDP/VIDEO to VCR1 and VCR2
Indicator out: off

3 **Set the playback VCR to the playback mode.**
4 **Set the recording VCR to the recording mode.**

By selecting the audio/video function switch while performing video tape copying, you can play any desired stereo unit in the system.

HOW TO USE THE VIDEO SIGNAL SELECTOR



You can freely select arbitrary video and audio sources, and create an original video tape. For example, you can use a Hi-Fi VCR to record an FM stereo CATV audio broadcast signal together with a CATV video broadcast.

1 Turn on the POWER switch of the unit. Also, turn on the power to the components which you wish to use.

2 Set the audio/video function switch in accordance with the audio source which you wish to listen to, then play the audio source.

To select a radio tuner program source, press the desired STATION CALL switch if the station has been preset. If the desired station has not been preset, tune in the station using Auto or Manual tuning.

3 Set the VIDEO SIGNAL SELECTOR switch in accordance with the video source which you wish to watch, then play the video source.

Each time you press the switch, the video source will successively change.

VIDEO SIGNAL SELECTOR

VSX-3000:
VCR1 → VCR2: Video signal source is VCR1.
VCR2 → VCR1: Video signal is VCR2.
VDP → 1 & 2: Video signal is VDP/VIDEO.
Indicator out: OFF

VSX-2000:

V + A ▼ ▲ (when switch is pressed once): Video signal source is VCR.

V + A ▼ ▲ (when switch is pressed once again): Video signal source is VDP/VIDEO.
Indicator out: OFF

- By performing the above operations, you can enjoy various combinations of audio and video.

Making a video recording

VSX-3000:
VCR1 → VCR2: A video recording can be made using VCR2.
VCR2 → VCR1: A video recording can be made using VCR1.
VDP → 1 & 2: A video recording can be made using VCR1 or VCR2.

VSX-2000:
V + A ▼ ▲ (When switch is pressed a second time): A video recording can be made using a VCR.

NOTE:
V + A ▼ ▲ (When switch is pressed the first time): A video recording cannot be made using a VCR.

4 Set the recording VCR to the recording mode.

NOTE:
- *The VIDEO SIGNAL SELECTOR will be cleared when the audio/video function switch is pressed. Set the audio/video function switch before selecting the VIDEO SIGNAL SELECTOR.*
- *When the VCR REC SELECTOR is set, the VIDEO SIGNAL SELECTOR will not operate. Set the VCR REC SELECTOR to OFF.*

CAUTION:
If the switch is operated during recording, do so after setting the recording VCR to the pause mode. If the switch is operated when the tape is traveling during recording, the recorded image and sound may be disrupted at the point the switch is operated.

HINTS FOR BETTER RECEPTION

EXTERNAL FM ANTENNA

The main advantage of FM over AM is the quality of the broadcast signal. In order to benefit fully from the high signal quality of FM broadcasts, it is recommended that a special-purpose FM antenna be installed. In weak signal areas, a multi-element (3 element, 5 element, 7 element) antenna should be used.

FM OUTDOOR ANTENNA CONNECTIONS

To get the most from the receiver performance, a 75-ohm coaxial cable is recommended since it is more immune than the twin-lead feeder to noise and interference from external sources. If an FM antenna has already been erected outdoors, connect it, referring to the figure.

GROUNDING

Grounding is recommended if reception of FM programs is impaired by noise. To ground, connect a thick polyvinyl insulated wire to the GND terminal and attach the other end to a metal water pipe or grounding bar or wind it around a copper plate and bury it.

NOTE:
Never connect a wire to a gas pipe for grounding since sparks may ignite the gas.

EXTERNAL AM ANTENNA

If it is not possible to obtain adequate AM reception even by changing the orientation of the AM loop antenna, a separate indoor antenna, or an outdoor antenna should be installed.

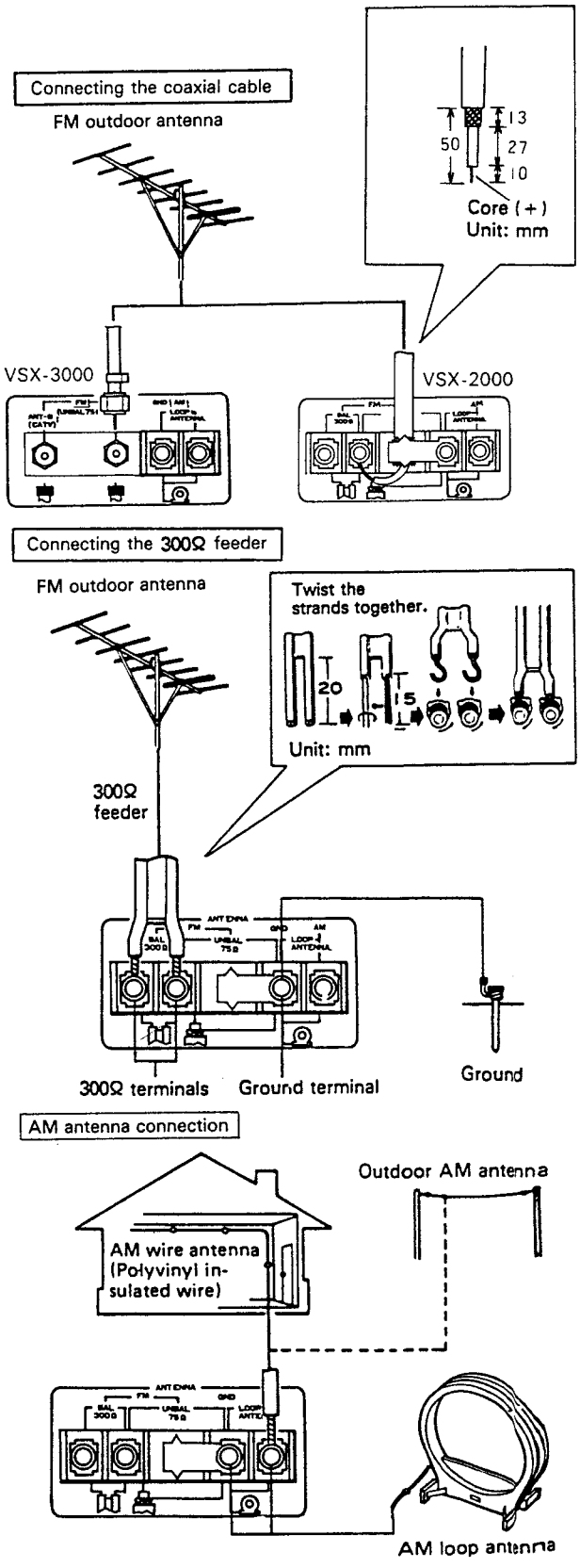
INDOOR AM ANTENNA

Use a vinyl insulated wire (5—6 m) and connect one end to the AM antenna terminal and affix the other end to the wall or ceiling, as high as possible.

OUTDOOR AM ANTENNA

If reception quality is not improved sufficiently even when an indoor antenna is used, a vinyl insulated wire should be installed outside and fixed in place.

NOTE:
Do not detach the AM loop antenna when using an indoor or an outdoor AM antenna.



TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used.
If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Cause	Remedy
Power does not come on even when POWER switch is pressed.	• Power cord is disconnected.	• Connect cord securely.
No sound is produced even when audio/video function switch is selected.	• VOLUME control is set to 0 (MIN).	• Press the VOLUME switch to raise the volume level.
	• MUTING switch is pressed ON.	• Press the MUTING switch once more to cancel the MUTING status.
	• Speaker connecting wires are disconnected from speaker terminals.	• Connect wires to terminals securely.
	• One or both of the input cords are disconnected.	• Connect input cords securely.
	• The connector bar of the ADAPTOR jacks is out of place. • The audio adaptor connected to the ADAPTOR jacks is not operated.	• Correctly connect the connector bar between the ADAPTOR jacks. • Switch ON the audio adaptor and operate it.
Sound is produced from one speaker only.	• BALANCE control is set too far to one side or the other.	• Set BALANCE control to center position.
	• One of the speaker connecting wires or input cords is disconnected.	• Connect wires and cords securely.
Noise is produced during reception of AM broadcasts when the power switch of this unit or other components is turned ON or OFF.	• AM loop antenna picks up electrical noise created by switch contacts.	• Place AM loop antenna as far away as possible from this and other components.
High noise level.	• Station has not been tuned in to correct frequency.	• Tune the station in correctly.
	• Antenna has not been connected or has become disconnected.	• Connect the antenna securely.
	FM reception • Accessory T-type antenna remains bundled up or it is not pointing in the right direction.	• Stretch both ends of antenna taut and locate in direction yielding optimum reception.
	• Weak broadcasting station signals.	• Replace accessory T-type antenna with outdoor FM antenna.
	• Noise picked up from other equipment (or, in particular, from passing automobiles). • Multipath results when signals from broadcasting station entering antenna directly are mixed with signals which have been reflected by mountains or high buildings on their way to antenna. This results in distorted sound and noise.	• Try altering direction and mounting position of antenna. If an outdoor antenna has been erected, place it as far away as possible from passing traffic and replace connecting cable with 75-ohm coaxial cable.
	AM reception • AM antenna not pointing in right direction.	• Change AM antenna's direction and find a position where reception is improved.
	• Weak broadcasting station signals.	• Erect outdoor AM antenna or connect ground wire.
	• Noise being picked up from other equipment (especially electrical appliances using motor or fluorescent lights).	• Stop using appliances generating noise or remove them from vicinity of stereo equipment.
No auto stop.	• Input signals are not strong enough.	• If a T-type antenna is used, change over to an outdoor antenna. • Perform manual tuning.

VIDEO SIGNAL SELECTOR does not work.	• VCR REC SELECTOR is set.	• Set VCR REC SELECTOR to OFF.
TV source can't be seen when the VCR's TV tuner is used.	• TV antenna is not connected to VCR, or connections are faulty.	• Consult the VCR's operating instructions, and connect antenna correctly.
	• You are attempting to watch a TV source using a VCR with copy system connections. In general, when copy system connections are made, the VCR's TV tuner function ceases to operate. For details, consult the operating instructions for your VCR.	• Disconnect the copy system connection (TV tuner function will operate).
Video tape copies can't be made with the VCR.	• Video tape copy connections haven't been made.	• Look again closely at the section VIDEO SYSTEM CONNECTIONS on page 9, and connect correctly.

SPECIFICATIONS

Amplifier Section

[VSX-3000]

Continuous Average Power Output is 60 watts* per channel, min., at 8 ohms from 20 Hertz to 20,000 Hertz with no more than 0.05% total harmonic distortion.

Continuous Power Output (both channel driven)
- 1 kHz, T.H.D. 0.05%, 8 Ω ..... 65 W + 65 W
- 20 Hz — 20 kHz, T.H.D. 0.3%, 6 Ω ..... 75 W + 75 W

Input (Sensitivity/Impedance)
- PHONO MM ..... 2.5 mV/50 kΩ
- CD, TAPE, VCR, VDP ..... 150 mV/50 kΩ

Phono Overload Level (T.H.D. 0.05%, 1,000 Hz)
- PHONO MM ..... 120 mV

Output (Level/Impedance)
- TAPE REC ..... 150 mV/4 kΩ
- VCR REC ..... 150 mV/4 kΩ
- ADAPTOR OUT ..... 150 mV/2.2 kΩ

Frequency Response
- PHONO MM ..... 20 Hz to 20,000 Hz ±0.3 dB
- CD, TAPE, VCR, VDP ..... 5 Hz to 70,000 Hz $^{0}_{-3}$ dB

Hum and Noise (IHF, short circuited, A network)
- PHONO MM ..... 73 dB
- CD, TAPE , VCR, VDP ..... 96 dB

PHONO (new IHF) ..... 74 dB

Others ..... 77 dB

Graphic Equalizer frequency band .....
100 Hz, 330 Hz, 1 kHz, 3.3 kHz, 10 kHz, ±8 dB

VCR Noise Filter ..... 100 Hz, 5 kHz, -3 dB

Loudness Contour ..... 8 dB (100 Hz), 3 dB (10 kHz)

Channel separation
- PHONO ..... 60 dB/1 kHz
- CD, TAPE, VCR, VDP ..... 60 dB/1 kHz

[VSX-2000]

Continuous Average Power Output is 50 watts* per channel, min., at 8 ohms from 20 Hertz to 20,000 Hertz with no more than 0.1% total harmonic distortion.

Continuous Power Output (both channel driven)
- 1 kHz, T.H.D. 0.1%, 8Ω ..... 55 W + 55 W
- 1 kHz, T.H.D. 0.5%, 6 Ω ..... 65 W + 65 W

Input (Sensitivity/Impedance)
- PHONO MM ..... 2.5 mV/50 kΩ
- CD, TAPE, VCR, VDP ..... 150 mV/50 kΩ

Phono Overload Level (T.H.D. 0.05%, 1,000 Hz)
- PHONO MM ..... 120 mV

Output (Level/Impedance)
- TAPE REC ..... 150 mV/3.9 kΩ
- VCR REC ..... 150 mV/3.9 kΩ
- ADAPTOR OUT ..... 150 mV/2.2 kΩ

Frequency Response
- PHONO MM ..... 20 Hz to 20,000 Hz ±0.3 dB
- CD, TAPE, VCR, VDP ..... 5 Hz to 70,000 Hz $^{0}_{-3}$ dB

Hum and Noise (IHF, short circuited, A network)
- PHONO MM ..... 73 dB
- CD, TAPE , VCR, VDP ..... 96 dB
- PHONO (new IHF) ..... 74 dB
- Others ..... 77 dB

Graphic Equalizer frequency band .....
100 Hz, 330 Hz, 1 kHz, 3.3 kHz, 10 kHz, ±8 dB

Channel separation
- PHONO ..... 60 dB/1 kHz
- CD, TAPE, VCR, VDP ..... 60 dB/1 kHz

* *Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.*

FM Tuner Section

[VSX-3000/VSX-2000]

Frequency range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... 10.8 dBf, IHF (0.95 μV/75 Ω)
50 dB Quieting Sensitivity .....
MONO: 15.3 dBf (1.6 μV/75 Ω)
STEREO: 37.1 dBf (19.5 μV/75 Ω)
Signal-to-Noise Ratio
MONO ..... 80 dB (at 65 dBf)
STEREO ..... 75 dB (at 85 dBf)
Distortion
MONO ..... 0.3% (1 kHz)
STEREO ..... 0.3% (1 kHz)
Capture ratio ..... 1.5 dB
Alternate Channel Selectivity ..... 65 dB (400 kHz)
Stereo Separation ..... 40 dB (1 kHz)
Frequency Response ..... 20 Hz to 15 kHz, ±1 dB
Image interference ratio ..... 50 dB
IF interference ratio ..... 80 dB
AM suppression ratio ..... 50 dB
Antenna Input
VSX-3000 ..... A: 75 Ω UNBAL F-type connector
B (CATV): 75 Ω UNBAL F-type connector
VSX-2000 ..... 300 Ω BAL, 75 Ω UNBAL

AM Tuner Section

[VSX-3000/VSX-2000]

Frequency range
When 10 kHz step .....530 kHz to 1,600 kHz
When 9 kHz step .....531 kHz to 1,602 kHz
Sensitivity
IHF, Loop antenna ..... 300 μV/m
Selectivity ..... 25 dB
Signal-to-Noise Ratio ..... 50 dB
Image interference ratio ..... 40 dB
IF interference ratio ..... 65 dB
Antenna ..... AM Loop Antenna

Video Section

[VSX-3000]

Input (Sensitivity/Impedance)
VCR1, VCR2, VDP/VIDEO ..... 1 Vp-p/75 Ω
Output (Level/Impedance)
VCR1, VCR2, MONITOR ..... 1 Vp-p/75 Ω
Frequency Response ..... 10 Hz—6 MHz $\pm\frac{1}{2}$ dB
Isolation at 3.58 MHz ..... 60 dB
Signal-to-Noise Ratio ..... 50 dB

[VSX-2000]

Input (Sensitivity/Impedance)
VCR, VDP/VIDEO ..... 1 Vp-p/75 Ω
Output (Level/Impedance)
VCR, MONITOR ..... 1 Vp-p/75 Ω
Frequency Response ..... 10 Hz—6 MHz $\pm\frac{1}{2}$ dB
Isolation at 3.58 MHz ..... 60 dB
Signal-to-Noise Ratio ..... 50 dB

Miscellaneous

Power Requirements
U.S., Canadian model ..... AC 120 Volts, 60 Hz
Other models.....AC 110/120 – 127/220/240 V (switchable),50/60 Hz

Power Consumption
VSX-3000:
U.S. and Canadian models.....380 W, 380 VA
Other models ..... 440 W
VSX-2000:
U.S. and Canadian models.....240 W, 300 VA
Other models .....350 W
Dimensions ..... 420 (W) x 120 (H) x 321 (D) mm
16-9/16 (W) x 4-3/4 (H) x 12-5/8 (D) in
Weight (without package)
VSX-3000 ..... 7.1 kg (15 lb 10 oz)
VSX-2000 ..... 6.9 kg (15 lb 3 oz)

Furnished Parts

FM T-type Antenna 1
AM Loop Antenna 1
Operating Instructions 1
Remote control unit 1
Dry cell battery 2

NOTE:
Specifications and the design subject to possible modifications without notice due to improvements.

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS [USA] INC. 5000 Airport Plaza Drive P.O. Box 1720, Long Beach, California 90801-1720 U.S.A.
PIONEER ELECTRONICS OF CANADA, INC. 505 Cochrane Drive, Markham, Ontario L3R 6B8 Canada
PIONEER ELECTRONIC [EUROPE] N.V. Keetberglaan 1, 2740 Beveren, Belgium TEL: 03/775-28-08
PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: [03] 580-9911

<88J00Y3D16 >

Printed in Japan/Imprimé au Japon <AR B1045-D>